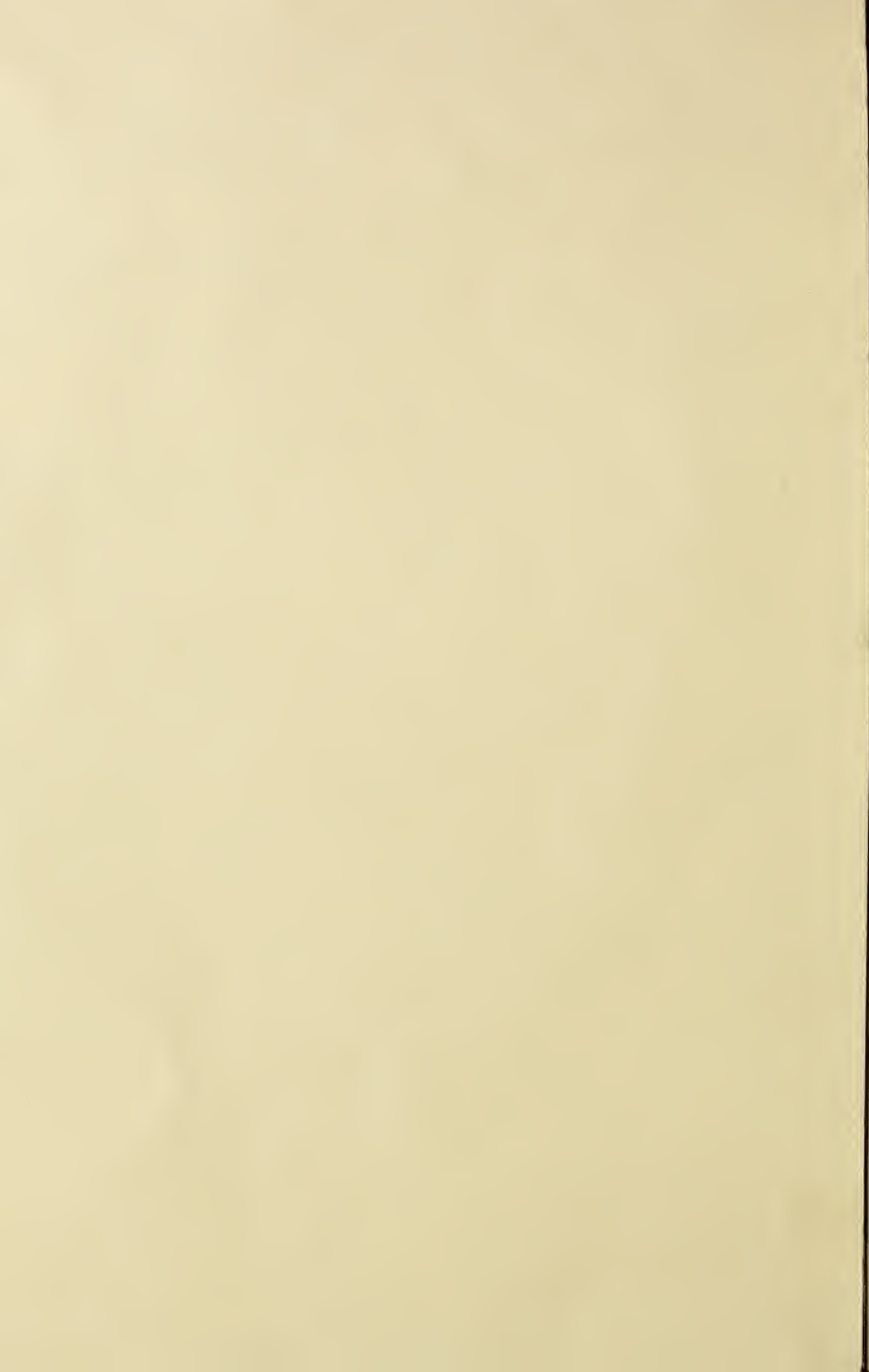


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# MARYLAND

DEVOTED TO  
AGRICULTURE, HORTICULTURE,



# FARMER:

LIVE STOCK  
and RURAL ECONOMY.

Vol. XXII. BALTIMORE, DECEMBER, 1885. No. 12.

## CLOSE OF VOLUME XXII.

This Number of the MARYLAND FARMER closes the twenty second year of the magazine. We are happy to be able to say that its growth and prosperity has been steady and sure. From the beginning it has found fast friends among a vast number of solid and intelligent farmers, who have always given us their substantial support. We have been gratified to see an increasing number on our list for the year just closing, and to know that our efforts for the advancement of the agricultural community have been appreciated by so large a number. Since we have commenced our contemplated improvements for the year to come, words of cheer have poured in upon us from all quarters. To the many individual subscribers, who have spoken so kindly in their letters renewing their subscriptions, we return our hearty thanks; and to our many exchanges, who have noticed our improved appearance, and had a pleasant sentence for us, we send back happy greetings—may they have all the prosperity they so cheerfully wish us.

The last number of the year 1885; a year in which we have earnestly labored for the benefit of our readers, and in which our correspondents, also, have given a greater variety of useful information than ever before. As we now review the year, we have every reason for thankfulness. The country has been blest with the most bountiful crops, and we have pursued our labors amid a reign of peace and good will

unknown to any other land or people. The MARYLAND FARMER from month to month has presented to its readers the latest information and improvements in agriculture, and if our subscribers will have the year's numbers bound, they will have a volume of about 1000 pages, with such a variety of subjects, that it will form a mine of valuable information for their future reference.

On comparing the present year with the preceeding ones, our list of subscribers, of advertisers, and of regular correspondents has increased so materially that we shall be able greatly to improve the volume for 1886. The large majority of our articles, in last year's volume were original, from writers of wide experience and solid attainments, won from actual contact with the farmer's vocation. We shall continue to increase this very desirable feature, and from the able corps of correspondents already engaged for 1886, we shall confidently expect to make the MARYLAND FARMER stand at least in the front row of Agricultural Journals, if not at the very head. We shall aspire to this latter position.

It will be proper to mention here a few of the more important improvements to be made by us.

1. An entire new dress, in every part of our Journal, constant additions of new type for reading matter and for advertisements.

2. A large space will be devoted to home matters, looking to the comfort of country homes, as well in beautifying the dwellings as in providing for the table, recipes of approved dishes.

3. Finally we shall procure a heavier and much better paper on which to print the magazine, and give a heavy, brighter and more cheerful cover to it.

And now we appeal to every one of our readers to strengthen our hands by sending us in lists of additional subscribers; favor us with many names in your neighborhoods to whom we can mail specimen numbers. Remember the Agricultural Journal gathers for you a knowledge of all the improvements in agriculture, all the best machinery, all the most improved stock, all the easiest and best methods of cultivation.

The farmer cannot do without his MARYLAND FARMER unless he is willing to fall behind the times; and we may ask with no fear of an unfavorable response, who, in this country is ever willing to fall behind the times?

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#### BEAUTIFY THE FARM.

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Make your rural home beautiful. Lay out spacious grounds about the farm house, plant shade trees, lay graveled roads and plant flowers. Dont lay up all your earnings for the benefit of your heirs and the lawyers, but spend some of it in beautifying your home. The farmer who always shuts his eyes to the aesthetic features of this life and screws himself down to the task of making money, loses a large portion and the biggest portion too, of his existence. His home should be attractive to himself, to his wife, and above all to his children. Unpleasant homes in too many instances drive the sons of farmers to the towns, to excitement and dissipation, and to wreck. Such sons do not generally leave pleasant and beautiful homes.

#### THE WINTER EVENING FIRESIDE.

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"With his ice, and snow, and rime,  
Let bleak winter sternly come!  
There's not a sunnier clime,  
Than the love-lit winter home."

So sang A. A. Watts, an English bard, and so sing we. December, as it heralds in the winter, so it brings to the farmer in our semi-Northern clime cessation from the busy duties of cropping and harvesting, and puts him more within doors, to enjoy for a time more of the amenities of domestic life, and the silent, though inspiring companionship of books, than has been his privilege to share for many months past. All seasons bring their compensations, and to the refined and educated farmer—for there are many such—winter is not unwelcome. Although it is a time when flocks and herds must receive careful daily attention, a time too when the fruits of the summer's labors are being rapidly consumed, and little or no work a doing, yet, ever mindful of the golden promise that links the years together in one unbroken round—"While the earth remaineth, seed time and harvest, etc., shall not cease,"—the prosperous farmer, with his bins and barns stored with needful provender, and everything snug and cosy about him, can look from his chamber window out upon the snows and rains without dread, and fearlessly sing, "Let the storm come down."

December is a time for general rejoicing and social visiting throughout farmland. Preparations are making for the Christmas holidays. The wood-house is filled with the best of fuel, dry and well-seasoned. The wood pile is heaped high with the oak and hickory logs and split wood. The vacant sheds and stalls are stored with forest leaves for winter bedding. The poultry houses are mended and chinked to keep out the weasel and other "varmints." And the home dwelling and surroundings receive thorough renovation. Loads of evergreen find their way into parlor, sitting



room, and chamber. The geese and turkeys are fed to repletion, preparatory to the "grand slaughter of the innocents." Parties of pleasure begin to be talked of, and the invitations sent out, and everything gives token that peace and plenty, like guardian angels, brood over the land.

Such is a faint picture of the rural life in December. But the brightest hour in the farmer's calender falls on the winter evening, when he shuts himself within doors, and, as Cowper sings:

"Wheels the sofa round,  
And while the bubbling and loud-hissing urn  
Throws up a steamy column, and the cups  
Which cheer but not inebriate, wait on each,  
Thus welcomes peaceful evening in."

With his books before him—the old-time standard poets, like Thomson, Goldsmith, Cowper, Young, Hemans, Campbell, and a few other that sing of the seasons' changing moods—for few of our modern poets do—he lolls back in his easy chair to refreshen his memories of the past and brighten up his imagination. Or it may be history, or literature, or the more obtruse contemplation of science engages his attention. Or does he turn to music and song, and play with the little ones? Ah, thrice happy the man who has such treasures, and thrice wise he who can find time to join in their plays, sports, tableaux, and charades.

Such is the winter fireside as it may be and often is in our rural homes. It is delightful to picture it thus. It is an inspiring topic. As Howitt says: "All our ideas of comfort, of domestic affection, of social and literary enjoyment, are combined in the picture they draw of the winter fireside."

May the present winter season be replete with more than a realization of all this, to every reader of the MARYLAND FARMER.

A field in England on which a crop of wheat has been successively grown for 42 years without any fertilizer, yielded 14½

bushels to the acre this season. The average yield in the United States this year was but 10½ bushels.

### FISH CULTURE.

I have a few thoughts to present to my fellow farmers all over the country. I know the times are hard and we are all anxious to turn an honest penny. When wool is only 28 cts. and wheat 80 or 90, we have to look sharp to make the ends meet, and a free exchange of thoughts often does much to assist us. I feel that I owe all that I have to ideas gleaned from the different papers. I bought a farm near the city in 1881. It was thought that things were at their lowest and *times must* brighten up. But expecting good times did not make my payments. I could not raise grain, cattle or hogs with any profit; so I was driven to something new. I struck on raising fish. I will say to start on that the U. S. Government will give free of charge to any one desiring to start in the fish business, from 12 to 20 German Carp fish to breed from. Our Government is doing all in its power to advance fish culture, as it is a valuable field almost entirely unoccupied. It requires no capital and brings in a large revenue, and there is a market everywhere for the fish. There is no possible doubt but what more money can be made in fish culture, than in raising cattle, sheep or hogs. One eighth of an acre devoted to the German Carp fish will make a profit of \$800.00 at the very lowest estimate. I think I hear a host of fellow farmers say, just as I did. "I would like the \$800.00; where can I get information regarding the fish business?" Ans. Write to the U. S. Fish Co. Columbus Ohio, inclosing a plainly addressed envelope, and you will receive free the information you desire. Will they tell me where to get the fish the Government offers to give the beginners in the business. Ans: Yes, they will send you blanks to fill out by which you can get the fish without cost. Is there any doubt about my making money at the fish business? There is no doubt. Do you think the government would go to the expense of raising fish and shipping them to different parts of the U. S. and then giving them to her citizens without cost, unless she was positive it was a profitable trade for those citi-

zens to engage in? How large a pond must I have to start with and what will it cost? Answer. A pond 15 or 20 feet across will do for a start and it will cost nothing except a little digging. You need not pay out one cent. There is no stream on my lot, what will I do for water? Carp fish do not require running water, they do better in still water. They delight in mud. What sections of the U. S. is best and most profitable for raising fish? Any place will do. North, South, East or West. You can find ready sale for the fish. Kansas is just as good a state as N. Y. Miss. as good as Mich. The German Carp are such excellent fish that they command a good price everywhere. Will it not take a long time to get a start with the 20 fish which the Government give? No indeed! Each female Carp lays from 40 to 50 thousand eggs every year. They increase amazingly fast and will increase your dollars just as fast if attended to. What season is the best to make a fish pond? Right away; the Government will send the fish from November 1st. to March 1st. Do you have to feed the fish in winter? No, they eat nothing during the cold months but lie dormant, while sheep and cattle are eating their heads off. If the government offered to send a fine pair of pigs to every farmer who would send for them, every farmer in the land would send in his name. Then why not get some fish when they cost you nothing; care for themselves and bring more money than any kind of farm stock. I wish every paper in the land would urge this matter on their readers, as I know they would be conferring a lasting benefit.

Pa.

W. B.

#### An Advance in Fish Culture.

SCIENCE says: Heretofore, in planting salmon, it has been customary to place the little fish in the streams and allow them to take care of themselves, but the new idea of placing them in protected preserves, where they can be cared for by the people living near at hand, and their growth to the proper size assured, will, no doubt, revolutionize salmon culture.

A similar experiment has lately been made at the station of the U. S. Fish Commission at Wytheville, Va., where 30,000 California trout have been confined until they have become vigorous fish of half a

foot in length. They will be used instead of helpless fry just freed from the yolk sac, in stocking the Atlantic Slope with this fine species.

#### GRASSES AND FORAGE CROPS.

Bulletin No. 17, issued by Prof. J. W. Sanborn, of the Missouri Agricultural College, at Columbia, treats of grasses and forage crops. The professor's report opens as follows:

"The College Farm has attempted to test many of the grasses and forage crops that are seeking public favor. It has met with an experience that is doubtless common. Most of our grass seeds, not of common growth, have proven failures with me, from a reason that deserves attention. Seed that is of rare use is probably held over by dealers until percentage of germination is small—So small that the spontaneous growth of the soil smothers the plants desired, unless drill culture is adopted with hoeing. I have had repeated misfortunes with rare grass seeds and other rare plants, and have reason to believe that farmers receive discouragement from like reasons, the result of which is to check the spread of experience with our newer varieties of grasses whose seed is not much called for. Of twenty-five varieties of grasses and clovers sown during the past year at proper times, but few have made a fair stand, most of the seed failing to germinate."

He concludes that the use of Johnson grass (*sorghum halapense*) has been encouraged too far north—a result of the high praises given it in the south, its natural habitation—and does not think it likely to prove popular in the north; and its price, 25 cents per pound, with a bushel of seed recommended per acre, makes it quite costly.

He reports indifferent success with alfalfa or lucerne (*Medicago sativa*). It requires a deep, dry, soil and a warm climate; is slow in securing a good hold of the soil, necessitating patience on the part of those who try it. He does not recommend it to the tillers of the average Missouri farm. On the other hand, red clover meets with his unstinted favor where it thrives as well as it does in Missouri. He says: "Clover can easily be carried to four tons per acre in two crops growing 7,200 pounds of dry matter per acre."



Vetch (*vicia sativa*) and sanfoin are relished by stock, the small peas of the vetch being very rich, and its tender vine nutritious and palatable. His own experience has not been favorable to its growth, but he thinks the winter vetch would do better in this climate and realize something of the praise accorded to it abroad.

Prickly comfrey has made a fair growth from the cuttings purchased, but is not relished by the cattle on the college farm. Prof. Sanborn believes our farmers have a plenty of better and more available crops at command for stock food.

The soja bean is a Japanese product, which analysis shows to be very rich, but the professor wants a little further experience with it before giving it his unqualified endorsement. He says: "That it will thrive I have no doubt, and that it is very nutritious is quite certain. When I have found what the animals will do with it in quantity, I will report more fully."

Egyptian corn, or rice corn, while chiefly praised for its drought-resisting qualities, gave upon the moist ground at the college farm a good yield of fodder that was relished by the stock. Prof. Sanborn, however, regards the corn plant as preferable.

Of the rural branching sorghum, or wild maize, the professor's report makes more flattering mention. "When cut to the ground new and often, an increased number of shoots spring up and gain a luxuriant leaf development for a second crop, which cows are very fond of." His conclusion is, that it will "warrant attention by those who are looking for some substitute for our common corn and clover."

This report concludes as follows:

"We have not in view, at present, for a climate of average rain-fall and of fair soil, the superior of these crops (corn and clover) for their seasons of growth.

For three years I carried on very careful experiments during the summer season with green food *versus* dry food for cows, weighing food, growth or decline in weight of cows, weight of milk and weight of butter. With the present price and plenitude of good pasture, clover, timothy, and grains in Missouri, I very seriously doubt the propriety of handling, daily, in little lots by high-priced labor, water-laden green food for our dairy or other herds.

The college expects to have about fifty of the more promising varieties of grasses under culture in quantities sufficient for cattle tests. It now has thirty acres of pasture in mixed grasses of eight varieties, sown in the fall of 1883 and spring of 1884.

If our reports seem untimely to the public, they will remember that the feeding problems that interest Missouri most can not be carried on at this place from lack of suitable buildings, which are unprovided by the state.

### ALFALFA, OR LUCERN.

We are surprised more farmers do not raise alfalfa than do. In fact, it is to many persons an unknown plant. It has advantage over clover in many respects, though resembling it in others. It has an immense quantity of roots, and they penetrate to a great depth, so that it is independent of droughts, seldom showing any injury from dry weather. Like clover, it does nothing the first year of consequence, and should not be cut or pastured, but allowed to gain a good footing. It will therefore for ten or fifteen years give two good crops of hay annually. It requires about fifteen pounds of seed per acre, and should be sown at the same time with clover. It benefits the land in an equal degree with clover. It is equally good for pasture or hay. Clover must be resown every third year, but alfalfa requires but once in a large number of years. It does exceedingly well on loose, porous soil, but on a close clayey subsoil and light soil it does badly. Some persons—and it does quite well—sow the seed in August, after the dry weather of July ceases. Others sow with oats in the Spring. It is a very fine, nutritious hay, and is eaten with avidity by stock.—*Spirit of the Times*.

"How is it my friend, that you never buy your goods from me? I have been in business nearly a year, and you have never yet patronized me."

"Well, you see, I am very sensitive."

"What has that to do with it?"

"A great deal, you never advertise, and I have not got the cheek to go where I am not invited."

### ENSILAGE FOR THE DAIRY.

Mr. John Gould, of Ohio, writes the *Country Gentleman* as follows respecting the use of ensilage as a cheap, but exceedingly valuable food for the production of milk. The cheapness by which it was put into the silos is surprising, and indicates that these Ohio dairymen are demonstrating that ensilage can not only be grown abundantly, but preserved so cheaply that the rough fodder for a cow need not exceed a mere nominal cost for the winter months. The letter says:

"I have been investigating to some extent the cost of filling the silos about here, and I find that with different methods from those originally practiced, the cost is surprisingly small. Near me are three silos holding not far from 400 tons each, and these are now filled and weighted ready for winter. That of Mr. Wing has 350 tons pitted, at a cost of 14 cts. per ton. Mr. Blair, another neighbor, has 400 tons in the pits, at a cost of 13 cts. Mr. Emory is counting on about 15 cts., and Mr. Rice, with an small silo, will probably get off with an outlay of not far from 10 cts. per ton. These figures do not include any compensation for the labor of the owner and his teams, but exactly what it costs for hired labor and breakage, the same rule the farmer applies to cutting hay, or grain, or other farm work holds good.

The idea of slowly filling the silo, is the explanation of the whole matter. The haste is avoided, and in its place—which means a great army of extra men and teams, at a price far above regular wages—one gets along with the ordinary farm help, and an extra man or two for three weeks, at regular month wages. The employment of an engine, which, if the farmer does not own, and few do, is by slow filling unnecessary, and a single tread horse-power will put its twenty tons of fodder into "chop" quite as well. Then if two teams are furnished, one for each man, and a fifth horse for the tread, the matter of filling goes expeditiously forward. One of the teams can early in the morning be put on the reaper, and the day's "cut" is soon down, and the drawing then commences. During the week the horses are changed about, so that each one has his turn upon the power.

By building the silo with three partitions, the filling can be alternated to each day, and by the third day the fodder in the first pit will be up to nearly or quite 125°, and ready to receive its quota of fresh cut fodder. By this means, hurry and worry are wholly avoided, sour ensilage has no part or lot in the question, and, as in the case of Mr. Wing, or Mr. Blair, the employment of not to exceed \$45 worth of labor each, has put the feed for each sixty head of cattle into the silos. If three tons of ensilage are worth a ton of good hay, then these men will feed a coarse ration this winter, costing them less than one cent, not counting interest on land or owner's labor. The produce of each of these silos grew upon about twelve acres of land, and will each amply winter 65 cows, aside from the grain, and their equivalent in hay would have required at least that on more than 200 acres of average Ohio meadow land. As to the healthfulness of ensilage one has only to look at the stock of Mr. Rice, who has fed it five winters, Mr. Jos. Breck four, and Mr. Wing four, to decide that it is good feed, as well as cheap, and as the last two gentleman are largely engaged in the production of winter milk, their advocacy of it, enlarging their boundaries, and increase of stock, tell better than any other argument in its favor.

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### LUCK ON THE FARM.

A Wisconsin dairyman uttered a great and pregnant truth when he remarked at a meeting of dairymen that "it was not by a special dispensation of Providence that a certain farmer received \$98 per head for the yearling product of his cows, while his neighbor received only \$30 per head." "So it is not a special act of Providence," remarks Mr. Henry Stewart, "that on one side of the fence corn yields 80 bushels per acre and the hay three tons, while on the other side the products are 30 bushels of corn and a ton of hay." An enterprising farmer writes that he is cutting his second crop of clover, which yields a full ton per acre, and his neighbors wonder how it is. The secret is that this farmer used plaster on his clover, which made all the difference; and his other crops are equally conspicuous and remarkable because he uses fertilizers



liberally as well as manure. The rain falls on all alike, but the better farmer gets the most good from the rain and the sun because he prepares and enriches the ground better, and so gives the natural elements better chances to extend their benign influence.—*Rural New Yorker*.

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#### BUTTERMILK AS A BEVERAGE.

We are likely to have a new era in temperance reform, brought about through the agency of an article that has heretofore been classed among the refuse or slops, and disposed of as food for the pigs—buttermilk. Those who have been wont to indulge in cocktails, sherry cobbler, punches and other strong-drink mixtures, as well as beer and whisky straight, have discovered that buttermilk is a pleasant and wholesome summer drink. It is sold over the bars of saloons and restaurants in large quantities, the establishment of creameries having thrown an ample supply of a superior article on the market. It has also been discovered that buttermilk, in a remarkable degree, satisfies the craving for strong drink and enables a man to endure fatigue in warm weather better than any other drink he can use. The proprietor of a bar, who disposes of over a dozen pan-fuls daily, says it is remarkable how quickly the appetite for it increases after the first glass. He thinks it is destined to destroy more drinking than St. John and his prohibitionists can ever do. "I have" said he "studied chemistry since we took to selling buttermilk, and I know that lactic acid is one of the chief agents that give acidity to the gastric juice of the stomach in health. this is the acid of sour milk, and therefore one of the best summer-diet drinks that one can use is buttermilk. It satisfies the cravings for acids by giving to the stomach a natural supply, and at the same time furnishing in its cheesy matter a good supply of wholesome nutrition."—*Lancaster New Era*.

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#### His Usual Luck.

The price of real estate was under discussion at the club: "Jones, old boy, I know where you can buy just the nicest little home, splendid cottage, grand fruit trees, and all that, for a song." "Just my luck," said Jones, "I can't sing a note."

#### A NEW COTTON PICKER.

The following gives an account of a new cotton picker invented by a gentleman of Chattanooga, Ten.

For many years the importance of an automatic machine for picking the fleecy staple has been recognized, and many attempts have been made to perfect such a machine. Comparatively little attention, however, has been given to this subject as compared to the machinery for manipulating cotton after it had been ginned. Mr. Wm. G. Sears, well known throughout Alabama, has been for many months working and experimenting to perfect a machine which would meet the requirements, and during the past winter and spring, while here in Chattanooga he has invented a machine, which has been made in this city, and which has stood all the tests made upon it. This machine was shipped to Albany, Ga., and will be put to work in a cotton field. Great care, patience, thought, labor and study have been put upon it, and we shall be glad to chronicle its success in the field.

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#### ESSENTIALS FOR GOOD BREAD.

The essentials for good bread are five: good flour, good yeast, thorough kneading, careful baking, and proper care after baking. Disregard one of these and the results will be an imperfect and unsatisfactory production. A cool dry place is the first need for the keeping of flour, and in such place it will rather improve than deteriorate with age. Graham made by the old process is very likely to heat and spoil in hot weather, and rye and indian meal are equally susceptible. It is better to buy the last two in small quantities, or, if ground near at hand, to grind as needed.

The best flour is always the cheapest, that known as the Haxall or new process being the best for bread. This flour packs more closely than that made by the old process, a pound of it not measuring as much as a pound of the old, so that if an old rule gave a measure of four quarts to be used, three and a half quarts would be sufficient. The old process makes better pastry and cake, and it is quite worth while to keep both on hand. No infallible test for flour can be given. It is best to

try several brands, and when one has been found thoroughly satisfactory, cleave to it thereafter.—Helen Campbell, in *Good Housekeeping*.

### THE BEST CORNMEAL.

Parties interested in the manufacture of cornmeal are waking up to the importance of using rolls for that purpose. The meal made is of such a superior quality that it readily commands a higher price in the market, and has many other advantages, among which may be mentioned the fact that in all ordinary cases it does not require kiln-drying, since, in the various operations through which it passes in the series of breaks, scalping, etc., it receives such a degree of ventilation as to remove almost the entire moisture. It is also so much more granular and free from flour that it does not pack solidly like the meal made on the buhr system, thus permitting the meal to be permeated by the atmosphere, and as a consequence prevents heating and souring. It is a known fact that meal that has not been kiln-dried is decidedly preferable to kiln-dried meal, and where parties can purchase a meal that will not sour readily, and which has not been kiln-dried, it is found more salable.

**COAL ASHES.**—Many persons make no use of coal ashes, but it certainly is an excellent mulch, "particularly for evergreens," so says an old gardener, and gardens where the soil baked badly have been brought into excellent condition by spading in coal ashes after other things have been tried without success. Fertilizing qualities are not claimed for coal ashes, but it gives depth to the soil in a very inexpensive way. It makes it work easier, serves as a mulch, and insects are not fond of working in it. E. V. in *Vick's Magazine*.

### A Deer's Age.

The age of a deer can be told by the number of prongs on its horns up to 7 years. The first year of their existence they have no horns; the second they have a spike or one prong on each side of the head; the third year they have a spike with one prong; the fourth year they have two prongs, and so on up to the age of six years. After

that the horns have six points. They stop increasing in number, and grow thick stocky, and strong.

### BULLETIN No. V—NEW SERIES.

N. Y. AGRICULTURAL EXPERIMENT STATION, GENEVA, N. Y.  
OCT. 23, 1885.

### COOKED VS. RAW FOOD FOR STOCK.

During the past summer, Mr. E. F. Ladd, our assistant chemist, devised and carried out an investigation into the effect of cooking cattle foods, which must possess the value of enforcing the truth of the many practical experimental trials which have shown that cooking food for stock lessens the nutritive value over the same food in a raw state: and has the supreme advantage that the conclusions are not subject to the chances for error which occur in the complex surroundings of a cattle feeding experiment.

The chemical evidence is shown in tables, whereby it is seen that there is a loss of albuminoid in the process of cooking, and also an apparent loss in the fat, [we have not room for the tables which show the entire investigation, and it is one of great importance. Ed] It shows that cooking is disadvantageous both in the loss which occurs of actual albuminoid, and in the depreciation in the digestion value of the albuminoid that remains.

E. LEWIS STURTEVANT, Director.

We recollect that a similar experiment was made some two years ago at the Agricultural College in Maine, with the above result, and we are perfectly satisfied by these experiments that uncooked food is better for stock than cooked.

### The Camphor Tree in California.

The camphor laurel, a native of China, Japan, Formosa and Cochin China, and the tree from which most of the camphor of commerce is obtained, has been introduced into California. It grows to considerable height and is valuable for timber, the wood being light and durable, not liable to injury from insects, and hence much in favor for carpenter and cabinet work. Every part of the tree, and espe-



cially the flowers, smells strongly of camphor. With respect to the growing of the camphor tree in California, it is said that it is easily propagated from the seeds or cuttings, and does especially well along the coast. A tree at Sacramento has attained a height of thirty feet. The cinnamon tree is another species of laurel.

### CHRISTMAS.

One cold winter day, about four years before the year *one* of our present christian era, a poor Hebrew family were on their journey to Bethlehem; and arriving late in the evening, found all accommodations taken, so that they were forced to take refuge in a rude outhouse, or shed, attached to the public inn. In this place, which was really a place of some comfort and security, so far as the weather and exposure were concerned, Jesus, the Christ, was born—his mother being scarcely seventeen years old. Christmas day is set apart to represent this birth day; although we are not certain of the day, and only know that it was a winter day near the close of what is now the month of December. In few words this is the history of Christmas.

But why is it such a day of gladness and joy? Why does the heart of everyone rejoice at its approach? Why does it represent to everyone a season of happiness and peace?

Throughout the South, the colored population have always considered it the "maddest, merriest day" of all the year; and in our homes the little ones always associate it with an abundance of "goodies" to be devoured, regardless of health or comfort. It is the day of gifts to kindred and friends. It is the season of kindly greetings, and of renewed friendship, and of generous thoughts and deeds. But why is this?

This seventeen year old mother, in giving birth to "the Christ," started the stream of "glad tidings of great joy, which should be unto all people." That stream has already widened, and strengthened, and over-

flowed, until it has enveloped myriads of our race, and deluged all our hearts with its abundance of hilarity and joy; until great and small pay their tribute of gladness to the young mother and her darling boy.

This boy when grown to man's estate, gave to the world the promise and prophecy of entire freedom from all that troubles, injures, and destroys the happiness of mankind; and in doing this wakened in every heart a response which has only grown deeper and louder as the ages have moved on. In this fact is the secret of the gladness with which the coming of Christmas is welcomed. Tired humanity, suffering humanity, toiling humanity, sinning humanity, see in Christmas the promise of relief. The joy, the rest, the gladness will come in the future. Time does not bound the vision of it, and eternity is but a vista into which we may look to discover the glory in store for us. We may all be happy as the day draws nigh, and join with the shepherds and the angels, at Bethlehem, in rejoicing over his birth.

"It came upon the midnight clear,  
That glorious song of old,  
From angels bending near the earth,  
To touch their harps of gold:  
'Peace on the earth, good-will to men,  
From heaven's all-gracious King.'  
The world in solemn stillness lay  
To hear the angels sing.

Still through the cloven skies they come,  
With peaceful wings unfurled;  
And still their heavenly music floats  
O'er all the weary world:  
Above its sad and lowly plains  
They bend on hovering wing,  
And ever o'er its Babel sounds  
The blessed angels sing!

But with the woes of sin and strife  
The world has suffered long;  
Beneath the angel-strain have rolled  
Two thousand years of wrong;  
And man, at war with man, hears not  
The love-song which they bring:  
Oh, hush the noise, ye men of strife,  
And hear the angels sing!

And ye, beneath life's crushing load  
Whose forms are bending low,  
Who toil along the climbing way  
With painful step and slow,—



Look now; for glad and golden hours  
Come swiftly on the wing:  
Oh, rest beside the weary road,  
And hear the angels sing!

For, lo! the days are hastening on  
By prophet bards foretold,  
When with the ever circling years  
Comes 'round the age of gold:  
When peace shall over all the earth  
Its ancient splendors fling,  
And the whole world give back the song  
Which now the angels sing."

And where in all this wide world should these hopes and promises bring more happiness than in the home of the farmer? The toil of the year is over, and he has the leisure now to think upon the years' trials and discouragements, and to realize that the "good time coming" is a prophecy based upon the very birthday of the Christ, and to be wrought out surely in the progress of the ages. Every farmer should gather around him his best comforts, and resolve to make Christmas day an era of true enjoyment for every soul he can influence. Let his family, first of all, have cause to rejoice from morning until night; and after their happiness is secured diffuse further occasions of joy to all others.

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#### HAGERSTOWN FAIR.

In our last number we mentioned the State and Washington County Fair held at Hagerstown, and referred to the host of gamblers and pickpockets who preyed upon the people. It is well known that we have for years advocated the exclusion of gambling booths and disgusting side shows from our Fair grounds, and we placed this wholesale depredation upon the public to the credit of the education which our fairs have been giving on this subject in the past. We had not then been made acquainted with the following facts which we extract from the *Hagerstown Mail*:

"The fair was the most satisfactory ever held in this county, and unquestionably one of the most creditable ever witnessed in this section of the country. Never before was there so little complaint or so

little cause for complaint, as on this occasion; and never from any exhibition of the kind did exhibitors and spectators go away more thoroughly pleased. With the exception of the losses of personal effects and money through the operation of pickpockets, who were specially favored in their work by the density and magnitude of the crowd, which were sustained by so many, everything passed off well and served to enhance the reputation our people have acquired for hospitality and judicious management.

The managers refused to rent privileges for gambling booths, as had been done previously, and which refusal materially reduced the aggregate receipts. More than a thousand dollars was offered by one concern for such privilege, and when refused the operators opened up outside of the gate, where the association had no control, and ran the concern unmolested. This step by the managers was taken in deference to the sentiment of our people and to prevent, within the grounds controlled by the association, the loss of large sums of money by heedless persons visiting the fair. Several hundred dollars were offered the management, also, for the privilege of selling pools, within the grounds, on the races taking place there; and although the Court of Appeals have held that such transactions are no violation of the laws of the State, and such sales are constantly made at the Pimlico races, the managers of the fair, in deference to the sentiment against such transactions, refused the application.

We have in every form endeavored to create the public sentiment, above referred to, by earnest words in our Journal, and we are happy to make record here of this good work done by the managers of this Fair. We place them beside the Cecil County Fair managers, among the pioneers of this much needed reform. May they always prosper in this good work; and we exhort the people to prove that they appreciate their work, by helping them in every way to a well deserved success in the years to come.

As the Fairs are now beginning to exclude these parties, we would be heartily glad to have the State Legislature take the

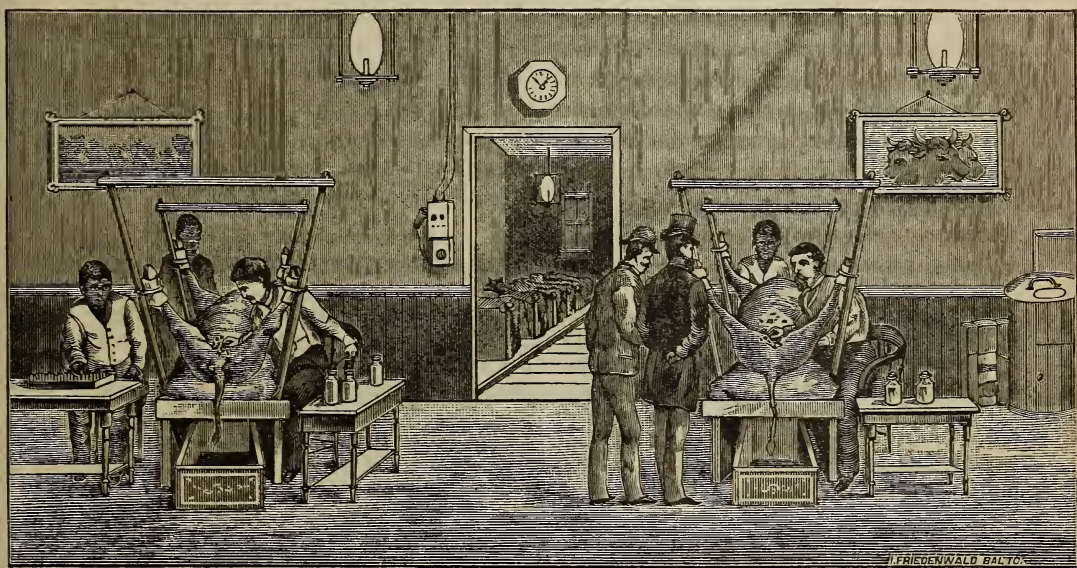
matter in hand, and forbid such gambling booths within a mile of any Agricultural Fair when in session. Can we hope for so much? It is a much needed reform which has been crying aloud to us year after year for a long, long time!

### VACCINATION.

In view of the recent dreadful visitation of Small Pox in Canada, and the threatening nature of the disease towards all parts of our own country, the accompanying ex-

those under their care are protected; re-vaccination should be sought by those whose former vaccination has not been of recent years, and the less fuel is left should the disease reach a community.

The most important feature in vaccination is to know that the virus used is absolutely pure and reliable. Knowing that the Pennsylvania Vaccine Co. (established in the spring of 1874) was one of the oldest and leading producers of animal vaccine in this country, we recently paid them a visit, and, through the courtesy of their gentlemanly manager, were permitted the *unusual* privilege of inspecting the various



tracts from the *Eclectic Review* are interesting:

The vital advantages of vaccination with animal virus, over humanized virus, has been so clearly and fully demonstrated by our leading writers—has become so generally adopted by the medical profession throughout the civilized world—as to require no further word of commendation from us. Vaccination with animal virus, when procured from reliable sources, can absolutely do no harm, and is the only known and sure preventive of small pox. To thoroughly guard against this dread disease, the simple and only known safeguard should be applied promptly. Physicians and parents should see to it that

departments of their large, thoroughly organized and equipped farm.

We found the company's several stables large, roomy, well lighted and ventilated, and they can comfortably accommodate upwards of one hundred animals, when needed. We were surprised at the general air of comfort which prevailed in this department. Each animal has a separate stall, is bedded to her knees with straw, curried at least once a day, and one or two grooms are constantly walking up and down the stables to keep things clean generally. The heifers used for vaccination run in age from ten to twenty months, are most generally of blooded stock, and they must be in fine physical condition.



It was very interesting to us, for the first time, to see the great care exercised in storing the lymph, as it oozed from the vesicle on the animal, on the quills and points. The entire scientific work of this department is performed by members of the company, which is an additional guarantee of their product.

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### SCIENCE IN FARMING.

We cut from an exchange the following lively and pithy extract on this subject. And while we sympathize with the disappointments of Mr. Buckmaster, and deplore the general indifference to any scientific improvement on the part of farmers generally, we have no doubt a good part of his replies came from those who thought that a gift of a free lecture could not be worth hearing. Any thing which costs nothing is seldom appreciated, be it ever so worthy and valuable.

A Mr. Buckmaster, in the course of a lecture recently delivered by him in England, on the importance of a better scientific knowledge of everything pertaining to to farm work, spoke of the difficulty he often had in awakening any interest in the subject among those who should be most actively interested in it. He quoted replies received from several persons to his offers of gratuitous lectures. These replies would be amusing if they were not too seriously indicative of a lack of culture among the English farmers. How truly the same criticism applies to our American farmers, almost every one of our readers will admit. Among the replies read by the lecturer were the following, which we are inclined to think could be readily duplicated, under similar circumstances, in most farming districts in America. One read as follows: "It is of no use coming here. Farmers do not believe in science. If you can sing a comic song I can promise you a good audience, but as for a lecture on anything useful, much as I may desire it myself, I do not believe you would have half a dozen persons." Another said: "we have several young farmers in the place, but I do not believe they would attend a lecture on agriculture. The young people here are too fond of amusement to

attend lectures or classes which require any mental effort."

One person to whom the proposition of a scientific lecture was broached, went so far as to reply: "If I don't know how to farm, I don't want a man from London to learn me. What I know about farming, I do know, and what I don't know, I don't want to know." It is perhaps conceivable that many persons should be indifferent to instruction or enlightenment on scientific subjects in which they have no special interest, but it does pass our comprehension to find this indifference extending to those subjects in which the parties are peculiarly interested, and the knowledge of which means, for them, the difference between success and good profits, and ill success and a bare subsistence. This reminds us that it seemed to us we heard less of farm institutes last winter than usual. Are these excellent mediums for the popular dissemination of useful information yielding to discouraging influences?

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To the Editor of the Maryland Farmer.

### CABBAGE CULTURE IN VIRGINIA.

Seeing B. W. Jones' article on cabbage in the November number of the MARYLAND FARMER and having been *always* a successful cabbage raiser, I will give the benefit of my method of cultivation.

First I have to say, the same lot of ground has been planted every other year in cabbage for over fifty years, and now as I look from my window I see it covered with cabbage, Flat dutch, Savoy and Drumhead, the average weight of the heads being over ten pounds. They are solid clean heads, without a trace of insect life or death about them. Very few of my neighbors have any cabbage, although I gave many of them plants. The drouth; the worm; the lice; destroys theirs, while mine grew flourishingly, and they come and see and wonder.

The ground I put in cabbage this year, was in early potatoes last year and seeded to rye after the potatoes were gathered. The rye was pastured by lambs during the winter and spring, in June the rye was plowed under, the ground harrowed and layed off in rows three feet apart. In July the plants were set out less than three feet between, covered with plaster (gypsum) and bushed to shield them from the hot



sun; for several days the plants were watered at night, and when the plaster began to disappear from the leaves more was sifted on. The weeds were kept down by an iron tooth rake, until the plants were large enough to plow. Two plowings, and a boy to follow with a hoe to uncover and straighten up the plants were all the cultivation given.

The ground during its fifty years of tillage has been made rich from the cow yard and sheep-fold; no commercial fertilizer has ever been used except the continual dusting the plants with plaster. In August I found my cabbage grew too fast, and discontinued the plaster; in September I found a few moth's eggs, and again used plaster. The eggs of the white moth can not hatch when in plaster, but if any should chance to hatch, the worm can't prosper in plaster whether it is dry or wet. The white moth lays its eggs in August. If the cabbage is used before the plaster leaves the head for the root, it is very easily washed off. It is much less work to clean the cabbage from plaster than worms and lice; besides the plaster is continually disappearing from the cabbage, and at the present writing I could not find a pound of plaster in my whole crop of cabbage, although there has been several bushels sprinkled over them. I attribute my success in growing cabbage to the use of plaster. I usually shelter my cabbage in October but it has rained so much and the ground is so wet, I am yet waiting (Nov., 6th,) for some dry earth to pit my cabbage for use next March and April. The cabbage for winter use is set under a shelter of boards and covered close to the heads by cedar brush.

The use of plaster protects the young plants in the bed from drying or as it is called burning up.

Va.

LADY FARMER.

### “Fearless” Threshing Machine.

We call the attention of farmers and threshermen to the advertisement of the celebrated “Fearless” Threshing Machine, elsewhere in this paper. Unparalleled honors have been bestowed upon this machine, at fairs and exhibitions, State, National and International. And, as equally good and reliable evidences of superiority have been given, by the highest authority, times without number, persons designing to purchase will do well to consult the manufacturer of the “FEARLESS,” MINARD HARDER, Cobleskill, N. Y.

To the Editor of the Maryland Farmer.

### AN IMPROVED VIRGINIA FARM.

Permit me to give you a synopsis of my farming operations for the year 1885. My object in doing so is to show my brother farmers that they can economise in their outlay for fertilizer to a much greater extent than many are now doing.

As you are aware, I have for some years been an advocate for the use of non-ammoniated phosphates. All acknowledge that practical experience is more valuable than theoretical ideas. I have for four years used extensively, dissolved South Carolina rock and kainit at a cost considerably less than one half the price paid for ammoniated fertilizers. As to the manner of applying all fertilizers, I am convinced that they should be sown broadcast, and to do this I have perfected a machine that will distribute any given quantity in the most perfect manner without any possibility of packing or choking in the hopper. Four years since I applied 200 lbs. of dissolved South Carolina rock and kainit per acre to wheat in the fall broadcast; the following spring I sowed one gallon of clover seed per acre; this was on very poor land (sandy loam), but the phosphate produced a set of clover, and this clover was allowed to remain on the land without grazing or being cut for three years forming a dence covering to the surface and creating a large amount of humus. Last spring I had this land ploughed and prepared as thoroughly as possible by harrowing and rolling with my combined machine, then planted two rows of corn at a time with the drill, and after planting used my combined machine for sowing the fertilizer, harrowing and rolling. The corn was worked regularly until in tassel, the land being kept loose and clean by shallow cultivation, and at no time a crust being allowed to form on the surface. This crop is now being housed and is yielding fully ten barrels (fifty bushels) per acre of very superior corn. The entire cost for fertilizer per acre for this crop was \$2.25 and the land is very much improved.

My wheat crop this year has been the largest per acre that I have ever made on this farm. I attribute this success to a thorough preparation of the land before seeding, and the use of 400 pounds of acid phosphate per acre. My experience in

wheat culture is that the seed bed should be as fine and solid as possible, and after seeding the surface should be made just as solid as the under part of the seed bed by rolling. This insures prompt germination of the seed and causes the roots to grow down instead of in the loose soil on the surface, which is the case where the land is left un-rolled after seeding. I never have winter killed wheat, as rolling after seeding prevents it, if the land be properly drained. Since I have resided on this farm (six years) I have raised a young orchard of peach, apple and pears, and find each variety of fruit adapted to the soil and climate, proper cultivation and attention has produced results I have never seen excelled, and but seldom equalled.

Many of the peach trees produced several boxes of fruit this season, and gave receipts of over \$100 per acre. The only fertilizer used in this orchard has been dissolved South Carolina rock and kainit, with some barnyard manure. My land (except that in grain crops) is now beautifully set in clover, and is producing crops of all kinds largely in excess of what it did when expensive ammoniated fertilizers were used by my predecessor. *Thorough* cultivation with an inexpensive fertilizer has accomplished this result.

This locality offers great inducements to practical farmers who appreciate naturally good land at low cost and good transportation facilities with fine climate, and the very best salt water advantages.

I have at last succeeded in having my invention of combined roller, harrow, seed sower and fertilizer distributor built in a satisfactory manner, and have in addition to the above combination added a drill attachment. This gives the farmer a machine that will complete the preparation of his land for any crop, and then plant the crop in the best possible manner. I have used it for two years, and proven it to be the most economical labor saving machine I have ever used. As soon as I can get a sufficient number built, they will be placed upon the market for sale and advertised in your Journal.

Very Respectfully &c.

Heathsville, Va.

T. R. Crane.

KNOW THYSELF by reading the "Science of Life," the best medical work ever published, for young and middle-aged men.

To the Editor of the Maryland Farmer.

#### FEEDING THE SOIL.

In order that plants may grow, there must be in the soil, the elements of their development. When left wholly to itself, nature has provided the way for supplying the exhaustion of soils, by a return to it, of the substances grown from it, after a certain period of time. A seed drops into the soil and a tree comes into existence, but each year it returns to the soil its foliage with more or less of its twigs, all of which go to restore the substance which the tree has assimilated to itself.

If there was nothing to interfere with this condition there would be little change in the general character of soils as regards fertility; but man comes in as an actor, and by his modes of practice produces changes that must needs be observed and provided for, or else, as has been the case in the past, there will be exhaustion of the soil. This can be readily seen. Every crop that grows draws a certain amount of nutriment from the soil, instead of its being returned to the soil, as the leaves of trees are returned to it, it either goes to provide food for man or animals, and if the latter, they in time are consumed.

If this consuming process was carried on in such a manner that the waste material was all returned to the soil from whence it came, the exhaustion would be restored by this means; but the trouble is that a large proportion of the products of the soil are transported to the large centers of population, and the waste material seldom or never finds its way back to the soil, but rather is carried away and becomes unavailable through the medium of sewers, etc.

We have on a former occasion referred to the waste that goes out from cities, and a slight reference to that at this time will be sufficient. Liebig has stated that if the solid and liquid evacuations of an individual could be entirely saved during the whole year, it would be amply sufficient to fertilize an acre of corn. Then think of the thousands that dwell in cities, pass by the aid of the water systems into sewers and thence into rivers or tide water and are thus wasted. Now bear in mind that all the food consumed in these centers of population comes from the various farms that compose the rural districts of our



country. The great wonder is that the exhaustion is not more severe than it actually is.

It will be seen that only a small proportion of the waste of soil products finds its way back to the farm.

With this view of the case it becomes very evident that with a continuance of the conditions mentioned, there must come a general and ultimately an entire exhaustion of the soil.

But in this matter it is much better to prevent so deplorable a condition. Every farmer knows that it costs much less to maintain an animal in good condition, than to allow it to grow extremely poor and then attempt to restore it. In either case the same process must be followed, that is, feeding. If the feeding is equal to or a very little in excess of the exhaustion, the animal will maintain itself or improve gradually; but if the feed is insufficient to supply the exhaustion, then the animal will grow poor, and at some period excessive feeding must be resorted to in order to restore to the original condition.

The same rule applies to soils; if they are fed annually to the extent of the demands of the crops grown, they will not incline to sterility, otherwise they will, and when once exhausted the work of restoration becomes much more difficult.

Regarding the matter of feeding soils much depends upon the crops grown, which largely determines the feed. In the future we may take occasion to present this matter of feeding for different crops, to the readers of the FARMER, believing that its great importance is worthy of and demands it.

Columbia, Conn. W. H. YEOMANS.

#### Red Clover.

A successful Pennsylvania farmer believes red clover the most valuable of vegetables as a mulch. Sowing late in the spring on wheat lands and harrowing it down with a common harrow, which will not hurt the wheat, in his judgment produces the best results. Clover growth is helped by lime and plaster. Large quantities of nitrogen are contained in the earth and air, and clover absorbs nitrogen more than any other plant. The plant and air work together in furnishing an exhaustless supply of food for all kinds of food plants.

Wheat and other cereals cannot obtain enough nitrogen from the air to sustain them, but clover and other plants with dense foliage can do so, and when they are ploughed down will furnish nitrogen and other plant food for the cereals.

To the Editor of the Maryland Farmer.

#### THOUGHTS FOR FARMERS.

This month closes the year's labors on the farm for 1885. It closes the current volume of the MARYLAND FARMER also, and have I paid for my renewal for the next year to this timely monthly visitor who keeps me posted as to the new improvements in agricultural machinery, special trials of skill, latest experiments made in the various departments of the agricultural employments and the new theories advanced, and above all gives me timely hints as to the monthly work proper to be done on the farm, in the garden, orchard, etc.? How stands my debit and credit account? Has my farm improved, and if any how much? These are serious, but important questions, and necessary ones to be well investigated if success in farming is to be desired, or expected. Close up the books and "take stock" as the merchants say, and see how you stand. If no books are unfortunately kept, resolve the coming year to do so, that you may know how you stand in regard to your property at the close of 1886. It is false economy if you find farming don't pay to hold on to it any longer. It is due to your descendants to see that your talent is not buried, but is active and brings some addition yearly. If the merchant fails in one thing, he soon is found in some other business. If your farm wont pay as a fruit farm, then try the cereals and tobacco. If they do not well repay, try stock raising and dairy, etc. But if you take our advice, try all at once, a little at a time, and see which pays best. We have long advocated mixed husbandry to a prudent extent, and ever denounced the policy of putting all your capital and energy in one single direction. Is the corn all gathered and put in convenient places for winter feeding, or is this work in vigorous progress? Has the ice house been cleaned out and made ready for the coming crop that a well prepared pond gives assurance of yielding before long? Are all the



shelters for the different kinds of stock prepared and roomy enough and made warm and comfortable, with a supply of straw or leaves or dried muck or saw dust for good beds, and the roofs seen to that they do not leak? Are the stables provided with such efficient ventilators as to admit air and furnish no deleterious draughts to any of the inmates? Do the fences seem in good order, and the ditches drain well, and gates work properly? Out-houses been cleansed, painted or white-washed, wood hauled in, and a supply well seasoned, cut and split for immediate use and under cover for the coming winter? Have the roots, etc., been well taken care of, and many other small matters attended to which we deem unnecessary to rehearse at present? If so, the farmer can have a clear conscience and can truly say he enjoyed his Thanksgiving and is ready to fully enter into the joys and pleasures of Christmas. He can say with the poetess, Eliza Cook,

"We'll feast and carouse in our lordly halls,  
The goblet of wine we will drain,  
We'll mock at the wind with shouts of mirth,  
And music's echoing strain."

And we will think with her too that

"Winter is coming—oh! think ye great,  
On the roofless, naked and old;  
Deal with them kindly, as man with man,  
And spare them a tithe of your gold."

P. P.

To the Editor of the Maryland Farmer.

#### OUR FOREIGN LETTER.

PARIS, October 31—The plant which lives and grows on the soil, restores to the latter when dying, not only all the nutrition lent, but good interest in the shape of materials absorbed from the atmosphere. Hence, why laying poor lands down to rest, either under grass or trees, ameliorates them. But when we remove from the soil, in the form of butcher meat, corn, dairy produce, or wool, we ought to restore what is taken away, if the fertility of the soil is to be kept up. All organic matters added to the land enrich it, and so do several inorganic substances.

The question of manures is receiving on the continent, very serious attention. Perhaps this is owing to the fact that, a more "intensive" system of culture on relatively small farms, may make up for the compulsory absence of steam tillage, the latter a necessity for large estates, in the

production, first, of butcher-meat and next of bread-corn. Now corn is a proof of either a naturally fertile soil, or of one that has been made so.

Farm yard manure, night soil, and nitrates, are the favorite fertilizers relied on in France. The climate being dry, limits the action of many portable or concentrated manures, but what has more provoked this limitation, is the extensive frauds on the part of dealers. Guano has proved very deceptive, not yielding results proportionate to its price. Bones are held in greater favor, because the farmer dissolves them himself. Then super-phosphate has the advantage over guano, for turnip culture in warm and dry seasons, and besides acts nearly as well in pushing the young plants well forward in that early stage when most exposed to the attacks of insects. Bone dust acts better on the bulbs too, while guano tells on the leaves.

Fossil, super-phosphates are not in marked repute, but seem to be making way, in proportion to their cheapness. When the fossil phosphate is ground, it is often mixed with ordinary farm-yard dung. Nitrogen being the standard test for all fertilizers, its mineral form, nitrate of soda, is in much request for cereal and forage crops. Salt petre, or nitrate of potash, has only the drawback of being high priced. Nitrate of soda alone, for grain crops, makes the stems weak, owing to their luxuriant growth not being hardened simultaneously, and this porosity leaves the plant open to mildew and similar fungi diseases, and also liable to lodge. Salt corrects this excess of stimulus and absence of stamina; 1 cwt. of nitrate, is mixed with 2 cwt. of common salt, per acre, and the mixture scattered at the rate of one cwt., every three weeks, in early spring. However many farmers in Germany and France prefer to employ the nitrate in the compost form. Kainit, that is brut, or natural potash, has not many admirers—as yet.

Night soil is extensively treated in France, because powdered charcoal exists abundantly. Mixing with dry earth is only of limited application, as those who contract for the night soil, do not resort to the Chinese mode of preservation. The Celestials mix the soil, with dry argile; form it into blocks or "loaves," and sell these at fairs. The Chinese pulverize them before using, and attribute the exemption

of their land from weeds, to their employment. In the Maritime Alps, agriculturists have these earth closets by the road side for the use of the passers by.

Paris is not so advanced as Holland and Belgium, in the concentration of human detritus. When carted to the reservoirs, the liquid portion of the night soil is run off into the Seine after its ammoniacal salts have been extracted. The residue is mixed with some charcoal, allowed to dry, and then scarified, and ground to powder. In the neighborhood of Lyons, the fecal matters in the case of poor soils, are applied in a fresh state to wheat and rye, generally during hard frosts. It is also applied in the spring in the same fresh condition, to land destined to be cropped with barley, hemp, industrial plants, and potatoes. However, it is a manure that imparts an acid character, or unpleasant strong taste to edible crops.

The Congress of Veterinary surgeons is holding its sittings in Paris. It has thrashed and winnowed the subject of peripneumonia, one of the most dangerous maladies that could invade a cattle shed, because it is a scourge of a permanent character, and rages ever with a monotonous intensity.

The unique cause of the disease, the congress considers to be contagious. Also, that the Willems method of inoculation, on sain animals, is an absolutely efficacious preservative; and that animals thus treated, cannot communicate the disease. Government, it was ruled, ought to continue the indemnity for all cattle slaughtered by order of the sanitary inspector, and no delay should occur in the killing of the affected stock.

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#### NOTICE!

It is mentioned in the article on Fish Culture, by W. B. of Pa., that the U. S. Fish Commissioner should be addressed at Columbus, Ohio. We learn, however, that all communications should at present be addressed to "Washington, D. C." and will receive prompt attention.

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 **NOTICE!** See list of premiums given with MARYLAND FARMER for 1886, in this number.

#### HARVEST HOME.

In order that we may occasionally have a glimpse of what is going on in other parts of our great world, in the minor affairs of country life; and also, to show by contrast the many peculiarities of English social farm life in its differences from American farm life, we give to our readers extracts from a sketch in an English paper, of a festive occasion recently held there, and which they entitle

##### A MAGNIFICENT HARVEST HOME.

Probably one of the most magnificent and extraordinary events which ever took place in England, occurred at the parish of Boughton, about eleven miles from Retford, on Friday last. This village, which is only a small one, but very picturesque, is on (or near) the estate of Earl Manvers, Thoresby. The vicar of the beautiful church of Perlethorpe, which is within the precincts of the extensive parish of Thoresby, is the Rev. T. I. Luard, and the two townships of Perlethorpe and Boughton, are not far from each other. Mr. Luard, who is reported to be a man of very considerable means, seems to have determined that the parishioners of the two places should enjoy an unusual harvest thanksgiving. The preparations were elaborate and extensive, initiated apparently without the smallest regard to cost. In the church, which is remarkably well built and shapely, service took place at eight o'clock in the evening.

We omit the account of the services, and the decorations of the church; save to mention that electric lights within and without bore a prominent place, to the great astonishment and delight of the throngs who had gathered from the surrounding country. After the services the supper, or dinner, was in order, and the people gathered into the barn and school house where the tables were spread for them.

These people were farm laborers and their wives for the most part and young country men and women. The dinner for their consumption was provided by Messrs. Spiers and Pond, of London,



who are of course known to be the chief public caterers in the kingdom. It was most diversified and elaborate. There were boars' heads and venison, game and fowl of all kinds, innumerable dainties, with champagne and other wines without limit. For dessert there were the choicest fruits—pineapples, grapes, peaches, pears. There was something comical in the way some of the country folks gazed on the serviettes not knowing what on earth to do until some one set the example, or gazed ruefully on the French words in the *menu* card, which to them were worse than Latin and Greek. Happily they had plenty of common sense and partook freely of what looked good. Talk of decorum! There never was a gathering of the most distinguished aristocracy which conducted itself with more sobriety, quietude, and downright good behaviour. It was quite charming. The little shyness visible at first soon wore away under the genial superintendence of the reverend chairman. This was in the schoolroom where he presided. He was supported only by the humble members of his congregation, and although he contrived to infuse perfect freedom and ease, every word he said bespoke the divine, the scholar, and the Christian gentleman. For, of course, there were speeches. Nothing particularly formal—the Queen, the organist, and choirs, were the principal, and there were cheers for the chairman, for Spiers and Pond, and Laing and Co., for the managers, for the ladies, and for everybody concerned. In both dining-rooms the decorations were accomplished by clusters of flags, mottoes, shields, and various heraldic emblazonments. In the barn one of the farmers was the chairman, and the Vicar of Boughton was present. The total cost of the entertainment is variously estimated, but it must have been something enormous. There are some cynical people in the district—for the unique affair is rumoured far and wide—who aver that the Rev. T. I. Luard might have spent the money more usefully. These objectors do not know what they are talking about. They have no idea whatever of Mr. Luard's inexhaustible generosity to everybody around him in all kinds of ways. He seemed on the present occasion to have only one object—that of making the people around him truly happy, and that he accomplished.

From the Department of Agriculture.

## CROP REPORT OF NOVEMBER.

### CORN CROP.

The present crop of corn is the first that is in full average of yield since that of 1880, which was the last of a series of six full crops, averaging 26 to 28 bushels per acre. During the most of this period of large crops of maize there were under-average crops in England and France, causing an unprecedented deficiency in wheat and meats. This shortage, with the abundance and cheapness of grain and pork products in this country, caused an extraordinary exportation of food supplies, altogether abnormal in quantity, and not to be continued in the future. The under-medium yield of corn of the last four years has stiffened prices and reduced foreign shipments, while the increase in foreign production has made necessary a smaller demand upon our surplus.

The present crop, grown on an area between 73,000,000 and 74,000,000 acres, is the largest in absolute quantity, though not the largest in rate of yield, ever made in this country. The highest rate of yield is 36½ bushels, in Nebraska and Ohio. The three corn-growing states which produce four-tenths of the entire crop, Illinois, Iowa, and Missouri, each average several bushels per acre less than in the census year; Illinois, 31; Iowa, 32; Missouri, 30. Utah averages 36; Massachusetts, Connecticut, and Colorado, 35; New Hampshire and Rhode Island, 34; Michigan, 33; Wisconsin, 32; Kansas, 31. The Southern States make an average yield. The quality of corn is very good in the East and South, medium in the central parts of the West, and somewhat depreciated on the northern border from Michigan to Dakota.

MARYLAND. — *Harford*: Materially shortened by heavy rains and wind-storms. *Kent*: Yield below expectations. *Talbot*: Sound and good. Many barren stalks, owing to failure of pollen to be properly distributed and tassels being prematurely ripened by drouth and heat. *Montgomery*: Damaged more than usual by wet and wind. *Carroll*: Much injured by heavy August storms. *Queen Anne*: Suffered somewhat from July drouth, but nearly an average crop. *Worcester*: Fair in some



sections, but very short in other parts. *Frederick*: Very fine crop. *Charles*: Thirty per cent. in excess of last year's crop.

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To the Editor of the Maryland Farmer.

### Why the Southern States Ought to be the Garden of the Country.

To fully answer this question the attention of the reader is drawn to the productions that are furnished as the great exports of the South, consisting so largely of cotton, sugar, rice, and cotton seed oil. The exports of cotton alone amounting to hundreds of millions of dollars, drawing the gold from all parts of the world, and giving employment to thousands in our own and foreign countries. The peculiar advantage in exporting these four great articles of trade is, that none of the soil is transported to other countries as it is well known that the component parts of all of them are merely transformed air and water, into organic matter, and neither have a particle of mineral in them, nor have they a trace of nitrogen, being merely a combination of carbon, hydrogen, and oxygen; i. e., charcoal and water. Such being the fact the question may well be asked, why so much poor unproductive land is found there? and from all accounts, much of the land is growing worse from year to year, notwithstanding the extensive use of fertilizers, the value of which none can dispute when they suit the land to which they are applied. In a warm country where the sun heats the earth to 80 and 100 degrees, oxidation goes on more rapidly than in a cold one; hence, the long and steady tillage in cotton, corn, sugar, etc., turning up the soil to heat and air, the oxidation of the carbonaceous matter goes on rapidly and soon the virgin soil becomes simply a mass of sand and clay, with the humus or carbonaceous matter burnt out, depriving the soil of the great mechanical and chemical condition by which a porous, open, absorbing soil is maintained, which not only absorbs the moisture and air containing the great elements of plant food, but holds on to all, which sand and clay have no power of doing. The plants that produce the staples of the South, cotton and sugar, have the power of transforming the movable elements, carbonic acid and water into cotton fibre, a pure

form of woody matter, or cellulose, and sugar; and to enable their roots to secure the two necessary agents, there must be a constant supply near the roots, and without a supply there can be no great crop, even if every element of a mineral or immovable nature is present in the soil. It must be seen the importance of the movable or unfixed elements being present, which by their nature are furnished in abundance wherever the usual supply of rain falls, and when the soil is in proper condition, will soon reach the roots and be retained for future use. To recover the virgin condition of the sand and clay—all soils being composed of these two compounds, but in different proportions—man has not time to wait for the old mode when a quicker one is presented, and there is no other way to do it but by turning under vegetable matter. Let this be from the fresh growing plants, or material from the barnyard, as either will soon pass to humus and other organic compounds which have the power of retaining the movable elements mentioned, which form nine and a half tenths of all vegetable matter and ten tenths of pure cotton and sugar. Therefore in exporting these two articles you are only sending away air and water in an organized condition, and your mineral matter and nitrogen is kept at home. This will give one of my reasons for saying the South ought to be the garden of the country. Other reasons can be given. To secure this peculiar vegetable mould, so called, two or three crops a season can be turned under in the South owing to the long season, while in the North but one can be used. Often it will be found that even the turning under of one crop will bring in play every element of fertility of a mineral nature that seemed perfectly dead before. The fermentation of a green crop generates carbonic acid, and this is one of the most powerful solvents known attacking most of the minerals found in the earth, and as all such matter must be in solution before it is possible to pass the cells of plants, it will be seen that not only is the plant food furnished the plant, but a solvent for its mineral food is also furnished, and this may help explain the wonderful effect of the decomposition of vegetable matters in passing to humus. I cannot explain more forcibly the effect of turning under vegetable matter than by quoting a

few lines from a letter recently received from a prominent cotton planter of Georgia, as follows: "I put in fifty acres of rye last fall, turned it under the last of May and first of June planted a crop of cotton on it, and I doubt if there is a fifty acre field of better cotton in the country. I left a strip in the field without rye and the difference is so apparent as to leave no doubt about the good effect of the rye." It will be seen, as stated in another chapter, that the sand and clay had abundance of mineral plant food for a crop which was brought into play by the chemical and and mechanical action of the rye. Any vegetable matter would have done the same thing—a worthless weed or a food growing plant. There is no doubt thousands and millions of acres in the South now almost worthless, that can be made valuable, fertile, and productive by simply restoring carbonaceous matter to sand and clay, and the little mineral matter can be quickly applied if necessary. Do not depend on the leaves to supply the bulk of plant food, but upon the roots, and they must have a soil impregnated with moisture, carbonic acid and ammonia, or nitric acid, which will not be found in sand and clay without carbonaceous matter; and the rule holds good for all vegetation, for the foundation stone of all is carbon and not nitrogen; hence, I think it is a great mistake in placing such a high value on what is found in abundance in the movable kingdom, hence, constantly being furnished to plants in the circulating air and percolating water through a porous soil with the elements of absorption in them.

MR. E. WHITMAN, I send you the above from my chapter on the South, which will appear in my forthcoming book.

Rock Hall, Md. A. P. SHARP.

#### Weights of Farm Produce.

Wheat and potatoes, each 60 pounds; corn and rye, 56 pounds; onions, 52 pounds; barley and buckwheat, 48 pounds; all kinds of meal, except oat meal, 50 pounds; oats, 32 pounds; nuts, cranberries and all other berries must be sold by dry measure, level. A barrel of cranberries must contain 100 quarts. A bushel of wheat weighs 60 pounds in all the States except Connecticut, where the legal weight is 56 pounds, though it is presumable that custom makes 60 pounds the standard there.

## LIVE STOCK REGISTER.

### ABOUT FATTENING STOCK.

It is of course a prime requisite in fattening stock to know which are the most nutritious foods, and then to have them. But in fattening stock for the money in it, something else besides the character or kind of food must be taken into consideration.

If we have a choice in animals, as we do have if we produce for the shambles, we must select those which have the largest capacity for converting food into flesh and fat, and then have the form to carry said flesh and fat. Depth of chest and fulness in the fore flank are essentials not to be overlooked. While such conditions are a guarantee of capacity or "room" for flesh, they are a further guarantee of a large capacity for converting food into flesh. Without ample powers for mastication, digestion and healthful assimilation of food, there is little chance for valuable results in fattening. In the extra pound of flesh that one animal puts on over another in a given time, measures the comparative value of one animal over another for beef production. The same amount of food to both may produce very different results, in amount or weight of beef product.

Beware, then, of the narrow chested animal for fattening purposes. Given large lung capacity and we have the first essential to health and vigor, without which fattening is impossible. Good form is as essential in flesh-making as in giving good appearance to the eye when the animal is to be sold, for beef or any other purpose.

LEMON JUICE FOR DIPHTHERIA.—Dr. Revillout states that lemon juice, used as a gargle, is an efficacious specific against diphtheria and similar throat troubles. He has successfully thus employed it for over eighteen years.



To the Editor of the Maryland Farmer.

### A MODEL HOG RANGE.

We will suppose what can be found on many a Maryland or Virginia farm, where there are hills or mountains and perennial streams of living water. But as for the matter of water, it may be had from wells anywhere.

When the stock of hogs desired to be kept numbers from twenty to fifty, select ten or fifteen acres of land, partly open field and partly woodland, and it is best if it lies along a swamp or creek side, and has a stream that never fails to flow running through it. If there is no stream or spring, sink a well for water. It is well if the land be partly hilly, partly low ground or moist flats, and partly dry upland. A portion of it should be cleared land, well set in orchard, crab, or Bermuda grass, or clover, or all these together for pasturage in summer. The hillsides and other ground is to be well set in nut and fruit-bearing trees, to afford forage in late summer and through the autumn months.

Dry, hilly swamp sides, where the oak, chestnut, hickory and other nut-bearers, and the wild mulberry, persimmon, grapes, and other fruits are now growing, afford a fine nucleus for a model hog range.

Fence this ground with a strong and close fence, and high enough effectually to keep in your own, and exclude other stock. Plant the vacant spots with white oak, walnut, chesnut, chinquapin, butter nut, hazlenut, and the like, taking care to get the young trees, if you can. as these will come into bearing sooner than trees raised from the seed. But you may plant the seed also, taking care, if you do, to enclose each seed with small three angle pens, to keep the hogs from them until they grow.

Clear out the rubbish and other undesirable timber from the range, to give the nut and fruit trees a better chance, but leave standing every nut and fruit or berry bearing tree you find. Anything that bears berries or fruit will be a help—holly, persimmon, haw, mulberry, black gum, cedar (for birds,) and all oaks and other trees that produce nuts—spare everything that will, at any time of the year bear fruit of any kind that hogs or poultry will eat.

Next plant out plenty of plum, cherry, and mulberry trees, also apple and peach trees, if you can find room for them. Be sure,

before you stop, to have the whole ground, except the pasture, pretty well occupied with trees and plants of some sort that yield food that hogs will eat. It is well to put out quite a lot of apple and peach trees, and especially have a few dozen white oaks to come into bearing as early as possible.

Thus, in a few years, you will have a model range for pork raising, and your meat will cost you the merest trifle in corn. You will find the business pleasant and profitable.

Va.

B. W. JONES.

To the Editor of the Maryland Farmer.

### JOTTINGS ON THE FIELD AND FARM.

By DR. ROBT. WARD, State Veterinary Surgeon, Balto., Md.

Change, by many is considered beneficial, but of all changes, change in temperature and the elements is most to be dreaded during this month; many cases of indisposition to man and beast have arisen from this cause. I have been concerned about meat cattle on many small farms—whereas on these farms excellent barns exist—but never a *shed* for protection of cattle in the yards during inclement weather. Let me advise every owner of dairy stock and sheep, to see to the importance of erecting good open shedding for the stock during storms, for when cattle are pastured, they should not be penned up in the barn, but under an open shelter. The reason is obvious.

The failure of crops has turned the attention of farmers to the importance of breeding. In England years ago this subject was seriously considered, and breeding developed, but as years rolled on the careless attentions of the government in relation to the spread of contagious or infectious diseases among vast and increasing herds of cattle, sheep and swine, and the seriously enormous losses which fell on the farmers and breeders, caused them to abandon breeding and stock raising for the time, and return to the former condition of farming corn, wheat, barley, etc. Now competition from other markets have brought reverses in this line of farming, and now again, the farmers are directing their attention to breeding, and it must be remembered that the leading farmers of Maryland, are those who have paid unflagging attention to stock raising.



In Maryland there is much, indeed, too much waste land, land lying idle, which might be easily converted into valuable pasture lands.

The health of Maryland live stock in the abstract, will bear comparison with any other state. Pleuro pneumonia it is true, does develop at intervals, and will so develop, as long as there exists an open market for cattle from all parts of the continent, as well as from all parts of our state. Inspection is so far a protection in actual diseases, but during the incubative stages, the physical or premonitory signs are not discernable, especially in open markets, and to thoroughly inspect and investigate such and every herd, would be a big task for one Veterinary surgeon to undertake, on a Monday morning; and even if he did, the premonitory signs, or the fact of the seeds of the disease lying dormant are not recognizable. Therefore it is a subject for Legislative consideration. I should advise that each state sending cattle into this state should be compelled to send a certificate signed by a duly qualified state Veterinarian, addressed to the state Veterinarian here, stating the number of animals, where from, and destination; and that whilst free had not been in contact with diseased animals on their last owners farms.

To the Editor of the Maryland Farmer.

#### THE SHEEP FLUKE.

The liver fluke is one of the most formidable insect enemies the sheep has to contend with. It gives the animal a yellowish, jaundice like color and appearance, its wool hangs in tatters or falls off, and watery swellings form beneath the lower jaw. Severe diarrheal attacks soon follow and the sheep dies. Thousands of sheep so perish every year.

The fluke is a kind of worm that becomes imbedded in the liver or is free in the gall, bladder and ducts. Here it causes bilious disorders from which the animal dies. The method of propagation is this: Numerous eggs are produced which pass with the bile into the bowels and thence into the dung and are left upon the grass, or may find their way into the ponds and low places. Here the young flukes may be taken again into the stomach, through the process of eating or drinking, and the same life history of the insect is

repeated. It should therefore be evident that pure water only should be provided for sheep, and pastures should be on high ground instead of low. J. W. D.

To the Editor of the Maryland Farmer.

#### ECONOMICAL FEEDING OF CATTLE.

Economy of feeding consists not so much in the amount of food fed as in the way it is prepared and digested.

The food should be well prepared in the first place by cutting and then mixing in the different ingredients in their proper portions, and then fed to whatever animals the farmer may have in good dry well bedded stables, and so that each animal may get its just share, and that without molestation from any other animal. For instance, a large cow in full milk, producing say three and a half to four gallons per day, will require much more food than one that is much smaller and producing only one fourth the amount of milk. So I say that the farmer himself should feed his cattle in the morning, at noon, and at night; and if he takes a pride in it, as he should, he will find many ways by which he can economise and yet make his stock fat and profitable. If he will not thus feed them himself, he had better hire some one that will, even if he has to pay good wages for him to do it. One of the great secrets of economical feeding is in having dry, moderately warm and well bedded quarters. If a man shivers all night with the cold he is not fit for much the next day, neither is a cow able to produce much milk even if she is fed an abundance of hay of good quality, and allowed to stand out all night in the frosty air. So with good feed, give warm shelter, and a good bed. Last winter I fed some thirty odd head of cows and young stock on a mixture of good clover hay, corn fodder (sowed for that purpose) and oats (cut in the milk and cured as hay) about one third of each mixed with warm water, and then an addition of one peck of corn and cob meal, and half peck of good midlings, and four pounds of linseed meal to each grown animal, and a smaller ration to the younger stock. Sometimes this mixture was varied with other feeds. They were fed this mixture three times each day in well bedded and dry, warm stables, let

out in the morning to drink, and given an abundance of corn fodder (cut off from the ground and husked in the field,) and had the run of a large straw rick, also. It astonished me to see what an amount of straw they would eat from the rick. I suppose for a change. The manure was carried each day from the yard and spread on wheat or meadow, if the fields were in condition to drive on. And let me say here, wherever this manure went my crops were abundant, and profitable as well. From my wheat ground manured thus, I cut this September, two good wagon loads of clover and fox tail per acre, which will go a long ways as feed this winter. This season I will feed in much the same way with the addition of a well cured crop of Hungarian grass grown after a crop of oats was taken off and several hundred bushel of small potatoes and turnips. The roots I shall pulp and mix with the other foods. Some may laugh at my feeding turnips, but I believe that animals are much like the human family in their appetites, and turnips with good corned beef is a very good dish for a cold winter day for any one, and turnips and good clover hay and mill feed will be relished by even a Jersey.

Plains Farm.

F. SANDERSON.

#### LAKESIDE HOLSTEIN-FRIESIANS AT THE FAIR.

This well known herd of Holstein-Friesians was exhibited at the Onondaga County Fair, held at Syracuse from Sept. 22d to 25th, inclusive.

In Holstein-Friesians the Herd Prize was won by the herd owned by Smiths, Powell & Lamb, of Syracuse, N. Y.

It is a noticeable fact that the prize winning herd was composed wholly of members of the celebrated Netherland family, and all closely related. This family has been wonderfully successful as prize winners from the time of their first incorporation into the Lakeside herd.

This list of prizes won by these highly bred animals tells no tale more emphatically than that there is value in "blood" and that the best families are the cheapest to breed from.

The Lakeside herd comprises now about 500 head of all ages and individually of high quality. The herd is catalogued in a neat volume, which can be had by addressing the firm.

#### GRADE UP THE STOCK.

It is not necessary to have pure bred stock in order to grade up. Work upon what you have. The most of us in this section of old Virginia have pretty good strains of most animals to start with. There is no better hog for the South than the Essex and the cross between the Essex and the Berkshire. Do not breed in-and-in too much, but exchange males every year or two with your neighbors.

Have the best ranges your farm will afford for all the stock. Woodland of oaks and nut trees with an adjoining field in grass, suits the hog. Give him the benefit of all the fruits, nuts, and acorns that you can.

The sheep will do well on the old fields where there is plenty of broom grass in summer, and a nice dry, sunny nook in winter. Put a Merino buck with the flock, and thus get a longer and finer wool. The Merino is the sheep for the South, but the Cotswold and the Southdown are deservedly popular in Maryland and Virginia. Near the cities and lines of transportation, sheep for mutton and lambs may well be a leading object in the business. But away off in the interior districts one should breed for wool mainly.

The cattle will need good pasturage all summer and fall, and comfortable shelter near the forage stacks in winter. The Devon makes a good cross on the native cows, and develops a strain good for beef and for work, and fair for milk. The Jersey is better as a milker, but good care and treatment will make the natives fifty per cent. better than now, and then we shall not care much for pure bred stock. We can show to-day some cows that we have bred up from native blood but little if anything inferior to pure bred Devon or Jersey stock. Crab grass pasturage in summer and protection in winter, is what has made the difference between them and the scrubs turned loose upon the commons. Only this and nothing more.

Va.

B. W. Jones.



## THE DAIRY.

To the Editor of the Maryland Farmer.

### IMPROVING DAIRY STOCK.

There are many excellent dairy cows scattered over the country, yet when compared with the whole number of cows, the excellent ones seem few. The great desideratum is that their numbers should be largely increased. How best to secure that object is the practical point. Breeding from the best cows is one means of securing the end desired. It is found however, that breeding from the best cows does not always produce equally as good cows as the original ones, and sometimes these best cows are produced from cows that were not particularly noted for their dairy qualities. How is this result to be explained? At first sight, it looks as though here the old axiom that "like produces like" failed to hold true. Many of these variations can be explained. It has been quite common to overlook the dairy qualities of the bull in all these breeding operations. If the bull has a good pedigree and is a good looking animal, that has generally been regarded as sufficient. It is probably true however, that the dairy qualities of the bull are even more important in this matter of breeding dairy stock than those even of the cow herself. The bull should be from a line of cows of superior dairy qualities, and his sire should be from a strain of excellent dairy animals. Such a bull would be likely to produce great improvement in all the herds of cows which he served. Not only the excellent cows would bring forth excellent dairy stock, but also the average cows would produce improved dairy animals.

The thoughtless use of a bull from a cow of poor dairy qualities, may seriously injure the dairy qualities of all the herds which he serves. The effects of a male out of a female of poor milking qualities is sometimes observed in flocks of sheep. Prof. Tanner says he knew "a very striking instance of the loss of milk in a flock (previously celebrated for their supply of milk) being traced entirely to the use of a very well formed ram, bred from a ewe singularly deficient in milk." Equal injury may be inflicted upon herds of dairy cows by the use of a bull out of a cow which was an inferior dairy animal. The dairy qualities of the

bull's ancestors seem to be more transmissible to the offspring than do even those of the mother herself. The dairy pedigree of the bull is a matter that all dairymen should give careful attention to before allowing him to be used in their herd. By giving proper attention to this matter and by using the best cows to breed from, it is believed that very great improvement can be affected in our dairy animals. Any cow which is a good dairy animal is worthy to breed from, even if she is an old "native." Some of the best dairy animals we have are "grades." The infusion of new blood, if of the right kind, into a breed, seems to be beneficial in bringing out the dairy qualities.

H. REYNOLDS, M. D.

Livermore Falls, Me.

To the Editor of the Maryland Farmer.

### MILK RECORDS.

*Dear Sir:*—Believing that all progressive dairymen and farmers generally will be interested in the remarkable yearly average milk records made by our entire herd of Holstein-Friesian cows, we take the liberty of mailing you the following condensed statement:

We have milked through the past year, 20 cows whose records average 15567 lbs., 9 ozs. This includes every mature cow and every four-year-old which has completed her year's record.

During the same time 15 two-year-olds averaged 12307 lbs. 8 ozs. and 24 two-year-olds, all that have completed their year's records have averaged 10810 lbs. This last list includes two heifers whose years are not completed.

By reviewing the records of our herd we find that it now contains 3 cows whose yearly records average 20051 lbs. 7 ozs. 10 cows whose yearly records average 18116 lbs. 7 1-5 ozs. and 26 cows whose yearly records average 16016 lbs. 1 oz. This list includes 12 mature cows, 9 four-year-olds, 3 three-year-olds and 2 two-year-olds.

As an evidence of the influence of high breeding, as indicated by milk records, we will say that ten of the above list are of the Aaggie family, seven of Netherland family, two of Aegis family, two of Clothilde family and five of all other families combined.



We are are milking this season more cows than ever before, and our records promise to surpass those of any former year.

The following averages, including our entire milking herd, giving the highest daily yield of each, will convey an idea of what our cows are doing:

5 cows averaged 85 lbs. 7 4-5 ozs. 11 cows averaged 78 lbs. 11-12 ozs. 28 cows, entire number of mature cows, averaged 70 lbs. 13 1-4 ozs. 5 four-year-old heifers averaged 75 lbs. 14 1-5 ozs. 18 four-year-olds, entire herd, averaged 63 lbs. 4 1-6 ozs. 11 three-year-olds averaged 57 lbs. 4 4-11 ozs. 24 three-year-olds, entire herd, averaged 69 lbs. 3 1-12 oz. 44 two-year-olds averaged 50 lbs. 2 1-5 ozs. 66 two-year-olds, entire herd, averaged 44 lbs. 11 7-8 ozs.—SMITHS, POWELL & LAMB, Syracuse, N. Y.

#### NATIONAL CATTLE GROWERS ASSOCIATION.

On November 17th and 18th inst. assembled in Chicago, the 3rd Annual Convention of the National Cattle Growers Association. At which 33 States and Territories were represented by delegates. Maryland being represented by Col. Edward Lloyd of Talbot, Major Frank Brown of Carroll, Messrs. Edward B. Emory of Queen Anne, and T. Alex. Seth of Baltimore county, who were appointed by Governor Lloyd.

The chief topic for discussion and action was the present condition of the cattle in industry as affected by the presence in several states of contagious diseases, particularly contagious pleuro pneumonia and hog cholera.

The immense value of our live stock and their annual products in meat, wool, pork and dairy products, is probably appreciated by but few of our readers, and the extent to which this industry is at present damaged by the prevalence of preventable diseases is equally unappreciated, to all of whom we recommend a careful perusal and study of the very able ad-

dress read before said convention by the Hon. Norman J. Colman, Commissioner of Agriculture. It is probably also unknown to many of our readers, that by state laws, Maryland cattle are denied admission into all the States and Territories West of the Mississippi, as well as Illinois, Indiana, Ohio, Kentucky, Michigan, and other states, East. We have no space in this issue for the able address referred to, but hope to resume the subject in next issue.

#### NEW ORLEANS EXPOSITION.

To the best of our recollection, ours was the first Journal to advocate and urge the continuance of the above exposition; and we are more than gratified, we are heartily glad, to learn of the great success of the opening day of the new movement. As the cold weather approaches no more delightful trip can be made than to New Orleans. Our own experience at the previous Exposition gives us assurance in promising every comfort and attention to visitors, at the most reasonable prices. We give below extracts concerning opening day.

The North, Central and South American Exposition, more commonly called the American Exposition, was opened Nov. 10th with imposing ceremonies. The enterprise is an outgrowth—it may be said to be a continuation—of the World's Industrial and Cotton Centennial Exposition held in that city last winter. Owing to the lateness of the season at which that great exhibition was fully completed in all its details, the United States and State Commissioners and the exhibitors, towards its close began to agitate the subject of a continuance.

The necessary funds having been secured, it was decided that the Exposition should be continued. In order to avoid legal questions and complications in connection with the World's Exposition, it was determined that an entirely new company should be formed.

The old Exposition Company, being anxious to liquidate its affairs, sold the Ex

position buildings at public auction, and they were purchased by the new company for \$175,000. The buildings and grounds were soon put in thorough order, the Exposition company was organized in all its departments and the opening day was fixed for November 10, the Exposition to continue until April 1, 1886. Applications for space began to flow in, and some days ago it was announced that all the space of the immense main building—covering thirty-two acres—would be fully occupied.

Pennsylvania was the last State to make application, and the management could only find room for her exhibit by shrinking up the space allotted to other States.

In order to give the Exposition a good send-off the business community closed their offices and stores. The various exchanges suspended operations for the day, and a very large proportion of the population was out on the streets at an early hour. All public buildings, the places of business along the route of the procession and many private houses throughout the city were handsomely decorated.

The Exposition management was much gratified by the interest manifested by the citizens of New Orleans as shown by the large attendance. The State Commissioners telegraphed to their respective States that the opening was a splendid success in point of attendance and enthusiasm and assured the future of the Exposition.


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#### CHEAPENED FOOD.

One of the essentials that dairymen must take into consideration is the item of expense of production. It is very evident that in any event there must be a great increase in the food supplied to the stock; it must be produced cheaper, and there must also be an increase in not only the number of cows kept upon a farm, or what is a better thing, keep cows that will produce at least a half more milk than the present average of ordinary dairies. How to increase the food product as well as the milk quantity, is the great study. Grass from pastures that takes three or four acres to summer a cow, hay cut from meadows that require two acres to furnish hay

enough to winter her, is the most expensive of foods. The food in the first place, must be so abundant that the cow is not compelled to go to any exertion to procure it; and of so fine a quality that she is induced to eat to repletion—for it is the extra food a cow eats, over and above that required to support her system, that makes the milk—and if the cow is a natural milker, a good result may be expected. The winter care of the cow is important in this matter of cheapening the milk product. That she may be so cared for that she will give a fine yield of milk, which is usually worth nearly three times as much in winter as in summer, is to be considered. The cow has to be fed anyhow, and if by feeding eight quarts of corn and cob meal per day, a crop raised upon the farm and not purchased, this winter milk need not be very expensive. Cheap milk is always the result of as nearly as possible home produced rations. The silo seems in the Northern dairy districts to be playing a most conspicuous part in the supply of cheap food. We give in another column an extract from the *Country Gentleman* written by John Gould of Ohio, who needs no introduction to our readers, upon this important matter, which I hope our readers will peruse with interest, for full reliance can be placed upon the statements made. There is no question but that there should be a more decided move towards intensified farming in this country, and the system of dairying can be made, even yet far more paying, if better cows were kept, better forage provided, and better care, and watchful attention given.

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 NOTICE!—We have quite a number of articles from our best correspondents that were received too late for this number, and other notices that were crowded out. All of which will appear in the January number.



## HORTICULTURAL.

To the Editor of the Maryland Farmer.

### FRUIT GROWING AS A SPECIALTY.

Much has been said and written about the profits of fruit growing calculated to mislead. It is true that this branch of farming may be made quite profitable under a skillful management, but only a few have the necessary experience, enthusiasm, and capital necessary to make it so. Fruit growing as a "specialty" is a dangerous undertaking. It is best to make it first a side branch of farming until the business stands firmly upon a paying basis. Or, the *specialist* must be the possessor of sufficient means to live independent of his business until his orchards or vineyards come into bearing. There is a peculiar fascination about the business of fruit growing which often has a dangerous tendency, that of overdoing the matter. It is well to have enthusiasm and all that, but "gumption" is the one great thing necessary after all. The person who starts out to make "fruit growing a specialty" should have some practical experience before undertaking it as a calling. Veteran fruit growers who would seem to have mastered the subject thoroughly, tell us the more they learn about it the more they find unlearned. No particular rule can be laid down to suit each locality, soil, and climate, and it is well for the fruit grower to adhere to the rules that do apply to his particular locality. First of all, he should determine by observation, the varieties suitable to his soil and climate, for what does well in one locality may prove utterly worthless in another, even under the best of care. The matter of varieties having been settled upon, suitable soil and location must next be determined. This requires some judgment, as much so as the selection of suitable varieties. It is useless to plant fruit trees upon low, wet, cold, sticky soils; as well as upon barren hill tops. While most trees delight in a moist soil, yet it must not contain any standing or stagnate water, and if the soil is not naturally well drained, it must be so artificially. An apple, pear, and quince tree will do better over a blind ditch than upon a hard, thin, and dry hill top, while the peach, cherry, and plum, do best in a dry porous soil, still it must be borne in mind that this character of soil

must not be poor and thin. Starvation is the chief cause of failure in the orchard, an orchard or vineyard of small fruits will cease to be profitable when the food supply is shortened, just as an animal will cease to be profitable when kept upon half rations. But few soils contain naturally enough of the food elements sufficient for a well established orchard or vineyard. These must be applied either in the form of stable manure or fertilizers. Bone and potash seem to meet the wants of most fruit crops, but nitrogenous matter not too concentrated, or caustic, is also required. The slow decomposition of vegetable matter upon and in the soil, is nature's way of supplying this demand, and it should be imitated as closely as possible, with fruits in cultivation. The practice of mulching fruit trees and vines is only an imitation of nature's methods.

Thoroughness in fruit culture must be constantly borne in mind. It is just as reasonable to expect success in a small garden half cared for as in a large plantation of fruit. The larger the acreage the more labor required, and no branch of farming is more impatient of neglect than that of fruit growing. He who spoke as never man spake, impressed the fact of the necessity and importance of *pruning* in order to ensure productiveness, this rule will apply *always* wherever the pruning knife or shears are used. Who-ever makes fruit growing a specialty, will sooner or later know the importance of this fact, and there should be with him no excuse for neglecting it, as the period of rest for fruit trees and vines affords this opportunity to the horticulturist. Thinning of fruit is usually too much neglected. This is frequently owing to the greed of the fruit grower, who however is only "penny wise and pound foolish," for judicious thinning of fruit does not diminish quantity, and so improves quality as to make it one of the best labor investments on the farm. Last but not least in the picking and packing of fruit for market. Too much care cannot be bestowed in this direction, as the appearance of the fruit in market determines its value. The "specialist" in fruit growing cannot afford to pack either carelessly or dishonestly, as his success in a large measure depends upon the reputation of his mark or brand of fruit. It is better to leave the culls or seconds at

home for evaporation, or hog feed, than to run the risk of usually overstocked markets. First class fruit will always sell, while an inferior article will bring the grower in debt nine times out of ten. In my next article I will endeavor to say some thing about cultivation among fruits.

ARUNDEL.

To the Editor of the Maryland Farmer.

#### ROSELAND FARM NOTES.

That I have written little of late for publication is not from any want of inclination to oblige those friends and readers of the FARMER, whose letters lie unanswered in my desk, but simply from the fact that there is a limit to ones capacity for work. One of my old readers who formerly lived and "trucked" in "Annarandel," but who like myself has located in Virginia, writes me a long letter begging me to continue my articles in which he seems to take an interest, and of the practical value of which I fear he has formed too high an estimate. One remark in this letter, however, suggests a good plan for making my new experiences of value to your readers. He says: "Tell us simply what you are doing, and I am sure that I for one will derive much benefit from a perusal of your account." To tell all I have been doing in the way of farming and gardening during the past few months, and the preparations I have been making for future operations, would I fear, be mainly an account of hard work, which has so filled my time as to sadly interfere with everything else. As some account of our operations here may not be uninteresting to your readers we will endeavor to some extent to answer our friends request.

Roseland Farm, we will say to those who do not know our location, lies fronting for nearly a mile on the north side of Hampton Roads, between the National Soldiers Home and the bridge crossing Mill creek to Fortress Monroe. It has been purchased by Mr. H. Phoebus, the wide awake proprietor of the great Hygeia Hotel at Fortress Monroe, who proposes to use it as a supply farm for his hotel and a pleasant home for his family. He proposes to make it the model hotel farm of the Country, and with that object in view, your correspondent has undertaken its improvement. No finer piece of garden land can be found

anywhere, and with this to start on, and abundant resources for fertilizing, its improvement will be an easy matter.

Since my arrival in the early part of August we have built a pair of magnificent greenhouses 20 x 100 feet each, which I believe I can say without egotism, cannot be excelled by any houses in the country. We have also made and planted 1000 sashes of cold frames occupying an acre of land. The frames are planted with Lettuce, Cauliflower, Pansies, Violets, etc. We have erected a large wind mill for pumping water in a tank in the top of the barn which has a capacity of 10,000 gallons and from which we have laid pipes all over the place and have in operation 16 hydrants. We have built the barn in which this tank stands and consider it a model barn. It is built in the shape of an "L," each part being 32 x 82, and two stories above a brick basement. In this brick basement are the horse stables for ten animals finished with a floor of asphalt blocks and iron stalls and mangers; a large room for carts, wagons, root bins, and large manure space under the wing in which the cow stable is located. On the floor above is a stable for twenty-five cows, a carpenter shop, fruit room, room for washing and packing vegetables, a large carriage room and a neat office from which a telephone extends to the Hygeia, two miles away. We have also built a hennery 40 x 60 feet arrayed with all the most approved conveniences for poultry hatching and keeping. These buildings have been put up in the most thorough manner, by day's work, and are all finished with slate roofs. Near the barn, we have under way a building for the accommodation of the men employed thereabouts. I forgot to say that we have a large and conveniently arranged piggery, in which over 100 porkers are enjoying life and luxuriating on the slops from the Hygeia.

This much as to buildings. Roseland farm itself, is as fine a piece of garden soil as I ever saw, a deep black loam that only wants "tickling to make it laugh a harvest." The trouble is that here-to-fore it has *only* been "tickled" and not plowed, and has been allowed to become foul with all manner of rank weeds. But the land is grand, and with diligence we hope to get and keep it clean. We have facilities for getting and keeping manure which will render us soon independent of the fertilizer



factory. Our three fourths of a mile of beach furnishes us with sea weed enough to cover the whole place annually a foot deep. This seaweed filled into the barn yard and piggery, will enable us to accumulate a vast amount of the best of home made manure, while the stables of the village adjoining will furnish a quantity more. As I landed here August 11th, to commence operations it will be readily seen that we have been pushing things in the way of building, while the regular farm work has not been neglected. Our new greenhouses are already furnishing rose buds, while the frames contain 25000 Lettuce, 3000 Cauliflower, with lots of Violets, Pansies, Mignonette, etc., and last but not least, a large frame of Carnations, which are loaded with buds and flowers. While we have frames for 1000 sashes, we shall use only 600. The extra frames are intended for Tomato and other plants in the spring, which will have to go into frames while the Lettuce and Cauliflower are still on hand but can do without the glass, which will be shifted on to the extra frames for tender stuff. Then we have a large high frame in which we have planted 500 Jacqueminot roses. They will have no glass over them until March, when they will be covered and started into growth to produce buds a little in advance of those in the open ground. In the greenhouses in addition to flowers, we are growing about 500 tomatoes. Some of these are planted in beds and others will be fruited in pots. The plants first potted are now in bloom. They would have been more advanced but for the delay in getting the house ready. Today, Nov. 14th, we lifted another lot of fine plants from the open ground (no frost to hurt them yet) and planted them in pots to succeed the first lot. Last winter in Baltimore county, Md., I cut my first ripe tomato on December 13th. We will hardly have them this winter earlier than the last of January.

In future letters I hope to give some notes of progress that may be of interest to your readers.

Ft. Monroe, Va. W. F. MASSEY.

ENSILAGE CONGRESS.—The Fifth Ensilage Congress will meet at the Grand Central Hotel, New York, January 20th, 1886,

## POULTRY HOUSE.

To the Editor of the Maryland Farmer.

### CHAPTERS ON CHICKENS.

BY EXPERIENCE

### CHAPTER XII.

#### GENERAL ITEMS.

1. To close this series of chapters, which has occupied their page in each number during the past year, I will give a few of the most important general items, bearing upon the subject.

2. The autumn is the best time for procuring stock, for the following reasons: Good stock is then plentiful and poultrymen are anxious to sell. Good stock can be bought cheaper at this season. If bought in November or December, they will be ready in February or March for broods of early chicks.

3. Keep your chickens in warm comfortable quarters during the cold weather; but have ventilation in their houses, so that they will be comparatively free from unpleasant odors. Provide them plenty of fresh water; feed them regularly; give them a dust bath—a good sized box of coal ashes—keep the premises clean; let them have a box of pounded charcoal, and broken shells, and gravel.

4. See that the roosts are low, so that heavy chickens can get up and down with ease. Have the boards for droppings under the roosts cleaned often, and covered with dust, and save the droppings as a fertilizer. Oil the roosts frequently and thoroughly with coal oil; and do this early in the day, so that there will be less annoyance to the birds when they go to roost at night. Roosts should be about three inches broad on top and not smoothed with the plane.

5. The nests should be changed frequently and at each renewal they should have sulphur sprinkled through them. They should be darkened, so that the hens will not eat the eggs. Arrange them so that they will not become roosting places at night. Have plenty of artificial nest eggs.

6. When chickens are confined, give them enough to do to keep them from idleness. Have plenty of litter; let them be a little hungry, and scatter small grain in the litter that they may work for their

living. To thrive, and lay eggs, and not cultivate chicken vices, they must be kept busy—Exercise is their great blessing.

7. Keep not more than fifteen in the same flock, yard and roosting house. In proportion to the increase of the numbers kept together will always be the decrease in the average number of eggs obtained. On this account we read of so many failures, where persons have desired to handle thousands under a single roof, and in a single room.

8. Lime and white wash are of great value in connection with poultry. Next to sunshine and dry dust, they contribute to the health and vigor of a flock. There is no danger of your using too much of these, nor of your using them too frequently.

9. Feed your flock regularly, and let your food be clean, sweet and attractive to them. If you can supply them with plenty of clean water, at a moderate temperature in winter do not fail to do so.

10. Keep large chickens. They are much less trouble than small ones. You can so easily keep them in an enclosure, and always know they are free from mischief. Your neighbors will have no cause to complain. They are generally warmer in winter than the small ones, and thus lay better in the cold weather. As a general thing they require no more food than the small ones.

11. Many topics remain for discussion; but our chapters must end here. I have confined myself to those points which would most interest and benefit the general keeper of poultry. At some future day I may, perhaps, continue the subject and give you items on fattening poultry and preparing them for market; on gathering eggs in the summer and keeping them for winter use and sales; on incubators and artificial mothers; on growing chickens to the feather and some "standard" requirements as to breeding. On caponizing and the effect it has in the final sale of poultry for consumption. Finally, on the diseases of chickens, then prevention and their cure.

12. I suggest these topics, and may not the pages of the MARYLAND FARMER receive communications from many of its readers on these subjects? Make the "Poultry Department" lively during 1886.

See list of premiums given with MARYLAND FARMER for 1886.

## AN AGRICULTURAL COLLEGE IN GOOD HANDS.

In order to bring to the public knowledge the opportunities that the Maryland Agricultural College offers and the advantages that may be there enjoyed, President Augustine J. Smith issued pressing invitations to those interested in education. Among those present were Governor Lloyd and Comptroller Turner. Letters of regret were received by President Smith from Prof. M. A. Newell, Messrs. W. W. Bowie, J. Carroll Walsh, P. A. Witmer, Judge Chew and others. Prof. Newell greatly regretted that an engagement which he could not give up prevented his coming in person, but said he would be present in spirit. He congratulated President Smith on the partial success he had already achieved, which he took as an omen of still greater success in the near future.

After the entertainment the visitors were conducted through the building and shown the appliances which the college has at hand.

President Smith has certainly made a great improvement in the college since he took charge, two years ago. The institution on the inside presents an entirely different appearance. All the furniture which was unworthy of the place, and even the china, has been replaced by new, and, though plain and unostentatious furniture, an air of comfort pervades the place. The rooms are large and airy, and the boys seem to be perfectly at home. In the faculty a complete change has been made. The chair of English literature is filled by Prof. Henry Latchford, a bachelor of Trinity College, Dublin; the chair of chemistry, physics and agriculture by Prof. G. S. Fellows, A. B., of Amherst; and the chair of mathematics and ancient languages by Prof. J. A. Chambliss, A. M. Captain J. B. Weems is acting commander. All of the professors seem to act with spirit and enthusiasm in their work, and are popular with the students.—*Baltimore American*.

ONE OF THE MOST MELANCHOLY SPECTACLES in the world is a human being shattered and broken down by the use of ardent spirits.

But the dilapidation may be repaired, the human ruin strengthened and restored to perfect soundness by a course of that most powerful of all vegetable invigorants, DR. WALKER'S VINEGAR BITTERS.



### MARYLAND AGRICULTURAL COLLEGE.

In response to an invitation from President Smith, a number of gentlemen visited the Maryland Agricultural College today to inspect the practical working of that institution. Among them were Gov. Lloyd, Comptroller Turner, and Mr. Ezra Whitman, who are members of the board of trustees. They were received by the company of cadets drawn up in front of the college under command of acting Commandant J. B. Weems. The visitors found the college in good condition, and the scholars, of whom there are 37, well and contented with their surroundings, which are of an unusually bright and cheerful character.—*Sun*,

PRESIDENT SMITH, of the Maryland Agricultural College, is making vigorous efforts to bring the merits and the needs of that institution prominently before the public. That the college is not performing the service for which it was established is not the fault of the management, but grows out of an unaccountable indifference on the part of the people towards that institution. This college is a State institution, entitled to State aid, and could be made useful and creditable to the State if a proper amount of public co-operation could be secured.

We regret our inability to accept an invitation to make an examination of the institution and attend the annual November ball.—*Belair Times*.

LARGEST STEER AND SMALLEST COW.—Among the curiosities at the Eighth Annual American Fat Stock and Dairy Show, was the largest Steer, and smallest cow in the world. The Steer weighs 4250 pounds, and is eighteen feet in length from tip to tip. The cow is only thirty-four inches high and weighs 345 pounds. She walks easily under the body of the steer.

AMERICAN TRIUMPH AT THE LONDON EXHIBITION.—The Mason and Hamlin Organ and Piano Co., have just received a cable despatch, announcing that the only gold medal for Cabinet or Reed Organs has been awarded their instruments.

### THE RED JACKET ADJUSTABLE FORCE PUMP,

Is the result of patient study and experiment by thoroughly practical men of large experience. Constructed on scientific principles, by skilled workmen, and using only the very best material, the Red Jacket is introduced, not merely as possessing all the requirements of a first-class pump, but as having points of superiority possessed by no other pump in America.

The aim of the manufacturers has been to produce a pump without a defect and without an equal. The adjustable feature of the *Red Jacket* distinguishes it from and gives it superiority over all other pumps of every kind.

No matter how deep the well, the buckets and valves can be taken out, releathered and replaced, in a few minutes, without taking the pump out of the well, or even disturbing the platform. A cut of the pump may be seen in the November No. of this Journal, and is for sale by E. Whitman, Sons & Co., Baltimore, Md.

### BOOKS, CATALOGUES, &c., RECEIVED.

Catalogue Fruits, Flowers and Ornamental Trees—Wholesale—John Saul, Washington, D. C.

Catalogue of Roses, Ellwanger & Barry, Rochester, N. Y.

At hand, and worthy of a good word from all who appreciate excellence, the American Newspaper Catalogue of Edwin Alden & Bro., Cincinnati.

Guide to Fruit Culture, an unusually fine Catalogue, J. T. Lovett, Little Silver, N. J.

The Third Annual Report of the New York Agricultural Experiment Station, from which we have occasion to make very useful extracts, has been received.

We return thanks for the "Transactions of the Massachusetts Horticultural Society;" always interesting and valuable.

We have received the very complete and valuable Newspaper Annual of N. W. Ayer & Son, Philadelphia. It leaves nothing to be desired in this department of business enterprise.

Homes for Home Builders, a book worthy of study by any person who is about to build a home. Illustrated, with elevations, diagrams, bills of lumber and labor. 12 mo., cloth, pp., 251, price \$1.50. Orange Judd Co., N. Y.

The oldest Agricultural Journal in Maryland,  
and for ten years the only one.



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EZRA WHITMAN, Editor and Proprietor.

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Transient Advertisements payable in advance.

Advertisements to secure insertion in the ensuing month should be sent in by the 20th of the month.

CHICAGO FAT STOCK.—The Annual Fat Stock Show was inaugurated at the Exposition Building Nov. 10, and surpassed previous exhibits. A dairy exhibit has been added, and made an excellent display; 700 delegates of the National Butter and Cheese Association were present.

The show was a great success, not so much in the great number of cattle as in their uniform excellence.

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